

Heavy Forklift

Big challenges made easy DCG180-330



A vital part of your logistics

No chain is stronger than its weakest link, as the saying goes. Nothing could be more true when it comes to managing heavy or bulky components between the key stages of the logistic value chain. On or off ships or trains. Between the foundry and the factory. From assembly to transportation.

This is the domain of the heavy forklift. No other piece of machinery matches a forklift's combination of raw strength, mobility and versatility. But it's a tough job. The sheer weight of thousands of tonnes lifted each day wears the mechanics and the materials. Yet the forklift must perform flawlessly every day of the week. Reliably, productively, safely.

Your forklift is a vital part of your logistics or production. In seamless interaction with a skilled operator, the forklift must meet your - and your customer's – demands of product quality and delivery precision, throughout your terminal, factory or assembly line.

Looking at your forklifts in this light, the choice of brand will come naturally. Only the best is good enough. Kalmar is equally renowned for its robust and reliable product quality as for its global service network and supreme customer support.

Safety in focus

Kalmar's range of diesel powered 18-85T forklift trucks offer highly responsive handling and superior visibility from the cabin, helping to keep your driver safe and in control at all times. Your drivers and co-workers will also benefit from the reduced noise and vibrations with a smooth and diesel powertrain. There are also a large range of safety options available that can further enhance the safety of your equipment and the drivers operating them.

A full range

Kalmar has offered an extensive range of diesel powered forklift trucks since the 1950's with over 100.000 units sold. Kalmar offer 4 diesel ranges, starting with 10-18T (medium), 18-33T (heavy), 38-54T (big heavy) and the gigants 60-85T (super heavy). We can work with you to configure a solution that fits exactly your requirements.

Four good reasons to choose Kalmar

- Highest productivity
- · Trusted and reliable partner
- · Better total cost of ownership
- · Great ergonomics, visibility and safety.

It is no surprise that customer survey results coincide with Kalmar core values. After all, we listen attentively to customers when designing and developing our forklifts. Looking at the big picture, adding up things that truly matter, it will always pay off to choose Kalmar.









Built for maximum productivity

Your Kalmar forklift will always deliver what your operations require. With Power Mode activated, operators will have the power necessary to go all-in at every instant and work with maximum productivity. Pushing it hard, while ensuring best-in-class fine-manoeuvring.

Our Cummins and Volvo engines are powerful, yet highly fuel efficient. You have a choice of engines which are compliant with EU Stage IIIA / EPA Tier 3 (Cummins) or EU Stage V / EPA Tier 4-Final (Cummins & Volvo).

All of our heavy forklifts come fitted with load sensing hydraulics (power-on-demand) as standard. The variable pumps automatically sense the load in every operation and adjust the oil flow accordingly, allowing

for faster lifting cycles up to 40% while reducing fuel consumption. This will help to improve your productivity as you can do more lifts per hour.

Many operators testify to the forklift's improved operational capabilities, especially when fine manoeuvring, such as side-shift and fork positioning. Also, the lowering speed has been increased, preparing the machine faster for the next lift.

Eco Drive Modes

Choose between three different drive modes, each optimised to meet your operational requirements. The forklift can be adapted to every task at hand, shifting many times during the day. The operator easily shifts between modes by using the cabin display screen.

Power

Brings out the maximum performance of your machine, allowing you to increase the number of tonnes moved per hour.

Normal

Balances power and economy to optimise profitability and reduce fuel consumption by up to 15%.

Economy

If total cost of operations outweighs the need for performance, Economy Mode reduces fuel consumption by up to 25%.

Save up to **15%**

Save up to 25%

Reducing lifetime costs

Purchase price is only one of many factors affecting total cost of ownership. In fact, price is a minor cost factor looking over the lifetime of your forklift. What truly matters in the long run is cost control and operational efficiency – and that will show clearly on your bottom line.

Compared to our previous model, the new DCG180-330 uses up to 15% less fuel in standard configuration. Add Kalmar's renowned product quality and reliability, increasing efficiency and uptime, and you see the true value of Kalmar.

The forklift's variable pumps and fan are automatically adjusted to the precise need. The pumps and the fan are only operated at full speed when necessary, reducing fuel consumption and noise. Another cost saving feature is Economy mode, an engine setting available to the operator from within the cabin, which further lowers fuel consumption.

The risk of unplanned standstills has been reduced due to intelligent error detection built into the new control system, which accurately pinpoints potential problems in clear text on a display in the cabin.

Cost saving features



Powerful and fuel efficient diesel engines.

The latest EU Stage V (EPA Tier 4-Final) compliant engines from Cummins and Volvo reduce fuel consumption by **up to 5%**.



Standard with Eco Drive Modes [EDM].

When optimising the setting with the EDM, the fuel consumption can be reduced by up to 25%



Energy efficient sub systems. Optimised load-sensing hydraulics with piston pumps and variable cooling fan can save up to 10%.



Increased uptime. Longer service intervals and improved problem detection reduce downtime.

Total lifetime savings.

Adding all energy saving features, savings **up** to 40% are possible.

Lifetime savings

Purchase price represents only a small part of the total cost of ownership. What matters in the long run is reducing operational and maintenance costs. And that is what Kalmar is all about.

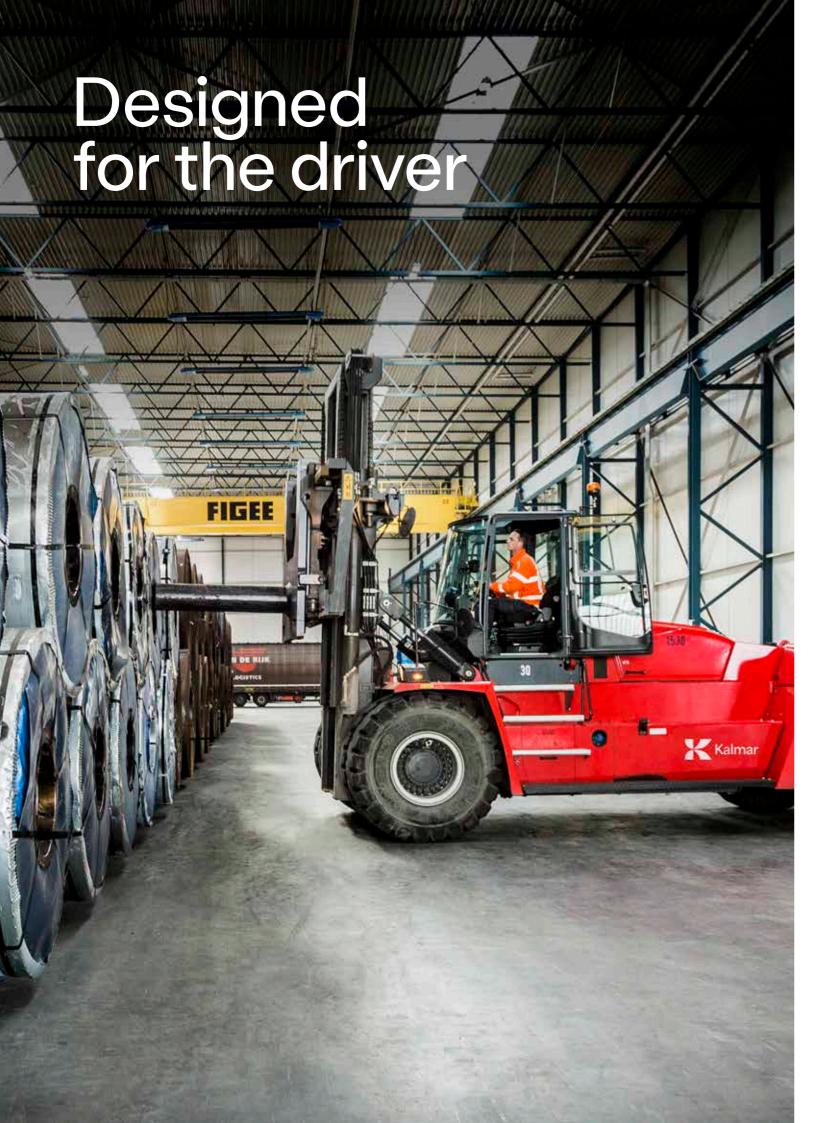
Purchase price

Resale value Environmental savings

Maintenance savings

Operational savings





Ergonomically designed

Kalmar Forklifts come fitted with our ergonomically designed EGO cabin. With slim line a-pillars, adjustable seating, steering wheel and control panel, your drivers will benefit from a superior operating environment and visibility.







With a choice of comfortable driver seats, a fault safe pedal system and powerful Electronic Climate Control system with smarter controls your operator will benefit from improved ventilation heating and cooling, plus a cabin with superior comfort and lowest noise level inside and outside.



Easy to operate

Our diesel powered forklift trucks give you a wide choice electric-servo lifting levers, dual lever joystick or single joystick, an electronically adjustable work console and side tilting steering wheel. All designed to make operating your forklift easier and more efficient to operate.



Extra smart

Our intuitive user interface combines visibility, sound and touch to create a perfectly balanced operating environment with an intelligent colour display at its heart. Advanced diagnostics, and smart settings allow improved operational control.



Choose your own upgrade options



Reverse Warning System (RWS). Knowing what's going on behind you is critical when other personnel are present. Four rear sensors and a reversing camera relay real-time information to an in-cabin display, alerting the driver to any dangers, increasing personnel and driver safety.



Heat Protection Package. To protect your machine and operator from extreme heat generated in foundries, where molten metal can reach 2000°C. All hoses in the mast and carriage are heat protected and an extra windshield is fitted to protect the cabin from splashes from the vat.



Alco-Lock. To ensure your driver is at their best when operating your equipment you can install an Alco-Lock system. This system makes sure that the driver meets alcohol blood level standards before being able to start the machine, much like a breathalyser.



Reversible Engine Fan. If your forklift needs to operate in a dirty and dusty environment then a reversible fan can help keep your driveline cleaner and operating optimally.



Reverse Beeper System. When your staff are working side-by-side with moving vehicles there is always a safety risk. Installing a reverse beeper system provides a clear acoustic alert when the machine is reversing so personnel can make sure they stay out of harm's way at all times.



Tyre Pressure Monitoring System. Helps to reduce wear and tear on tyres which results in reduced fuel consumption. Bluetooth sensors keep the driver advised of the condition of the tyres at all times. Active care of your tyres can result in a 10-40% increase in tyre life and up to a 10% decrease in fuel consumption.



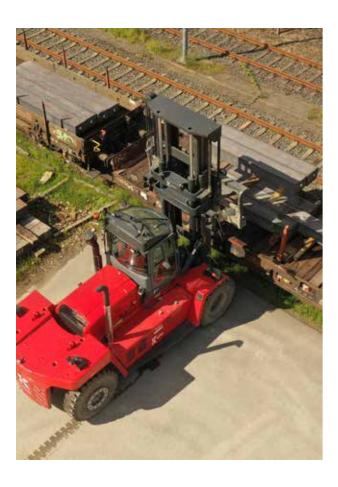
Additional lighting. If you have to operate your machine at night, extra lighting can bring greater operational visibility and safety for personnel. You can choose additional LED working lamps on your cabin roof, on the mast or placed at the front or rear of your forklift.

What do you need to lift?

Choose between a wide range of lifting masts, carriages, forks and attachments. We offer complete solutions whereby we assemble the attachment in the factory and integrate it with the forklift's other functions.

Metal industry

Our heavy diesel powered forklifts can lift, stack and transport metal slabs, bloms and billets or plates, coils, bars and pipes, which is made even easier and safer when you use speciality attachments including magnets, clamps, grippers, coil rams, forks or slings fitted to the lifting equipment. Also raw material supplies and recycling can be handled.



Concrete, energy and heavy industry

Flat, round or bulky concrete sections, wavebreakers, bricks and rocks can be lifted with ease, as can hardware for the energy sector: like supplies for oil & gas offshore sites, or biomass and nuclear plants. Heavy loads for the wind turbines and their sub contractors; producing foundations, mono-piles, tower sections, nacelles, drive units and blades can also be lifted and moved safely and efficiently.



Special and customised

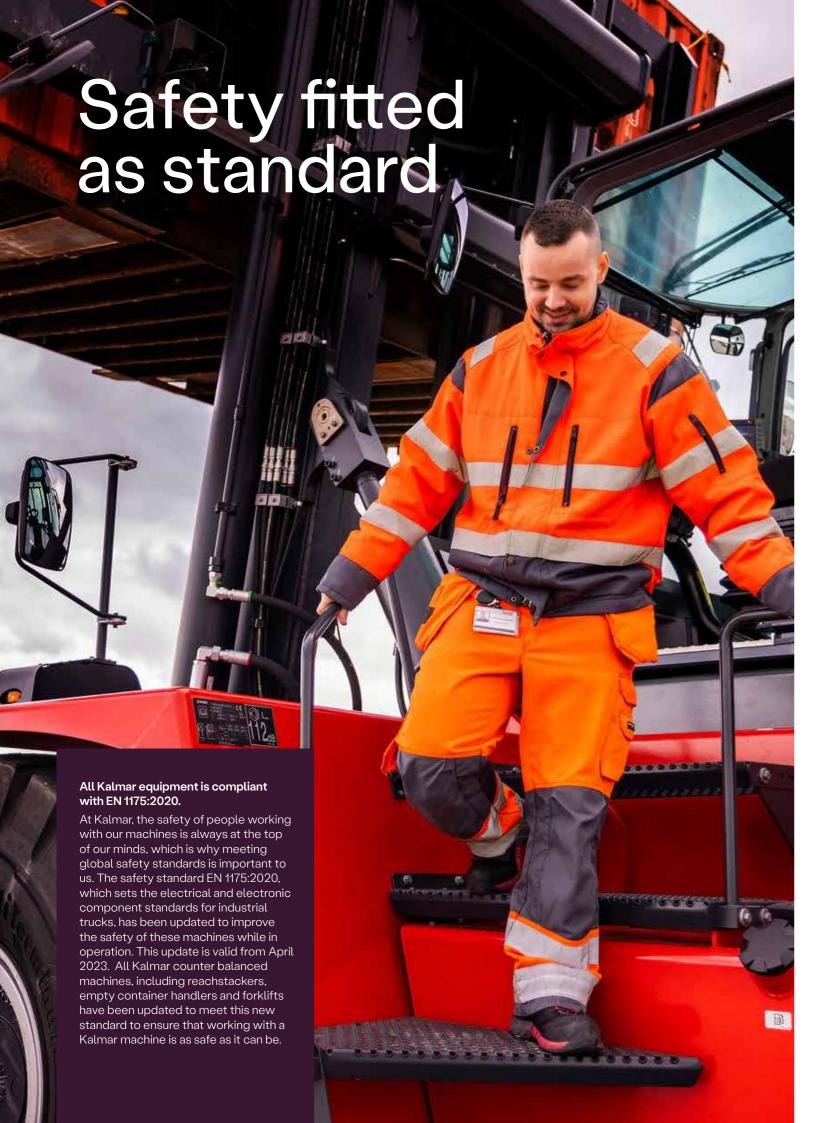
Kalmar has a long tradition of delivering highly customised solutions that solve our customers' individual handling demands and challenges.
Using our wide range of solutions, with tailor-made specifications and dedicated forklifts that will do the job with precision, efficiency and with low total cost of ownership (TCO).



Whether you're moving containers, handling various types of breakbulk, heavy project cargo or RoRo applications - Kalmar can deliver the efficient and safe material handling solution that you need.







For Kalmar, the safety of your drivers and maintenance staff is of critical importance, which is why our machines come with many more safety features fitted as standard than other machines available in the market.

The features listed here come fitted as standard on all Kalmar machines. You can enhance your employees' safety further by fitting your machine with our additional safety options listed on the following pages.



2-point seat belt. Ensures that your driver is safe and secure while operating our equipment, all Kalmar machines are equipped with an adjustable 2-point seat belt system.



3-point Contact System. Makes sure your drivers are safe when entering or exiting our equipment. All machines are fitted with steps and handles to ensure they can always maintain three points of contact with the vehicle, helping to keep them safe and preventing incidental injuries.



Double brake pedals. To avoid driver leg fatigue, every machine is equipped with dual brake pedals which require only heel to toe movements, allowing the driver to move his foot between the accelerator and brake pedals without having to move their leg.



Steps with anti-slip protection. To reduce the risk of your driver slipping or falling on our equipment, all entering and exiting points are fitted with non-slip surfaces giving them extra grip, so your drivers stay safe.



Control System. All our equipment is fitted with an electronic Control System for monitoring the machine's different functions while in operation, helping to keep your driver fully informed at all times with up-to-date Operating, Event Controlled and Error Code information.



Operating information. Our equipment's Control System provides several operating information menus, which give your operator and maintenance personnel a great insight into the on-going performance of the machine, allowing them to keep it running optimally.



Event controlled information. Provided through the Overload Protection System to warn the driver through the equipment's Control System if their load exceeds the specified safety limits.



Error code information. Should there be any issue with your equipment while in operation, the electronic control system will immediately alert your driver with the appropriate error code, so they know exactly what is going on and can take appropriate action.



Display. Cabins are fitted with a large easy to read display which keeps your drivers fully aware of the machine's on-going performance and any maintenance actions that need to be taken.



Control Breaker System for load handling.

All of our equipment is fitted with a Control Breaker System, which automatically shuts down the load handling system should a fault occur, until the fault has been corrected. Keeping your driver, equipment and load safe.



Operator Presence Detection System. Maintains the highest levels of safety for both the driver and pedestrians, as all our equipment is fitted with an alarm or visual indicator that comes on automatically if:

- The driver does not fasten their seat belt while in operation.
- The driver leaves their seat without engaging the parking brake.

In addition, if the driver leaves their seat while the machine is operational, the transmission is automatically shifted to neutral and loadhandling functions are disabled.



Engine/transmission Protection and Warning Systems. Warning systems, designed to protect your machine's driveline in case of higher than expected temperatures or a pressure build up, are standard on all equipment, avoiding unnecessary mechanical failures.



External reverse light. For the safety of others, all our equipment is equipped with external reversing lights that help the driver keep everyone informed that they are moving backwards.



LED lights. These come fitted as standard on all our equipment, providing better visibility when working in reduced light than halogen lights.



Neutral start switch. A neutral start switch means your driver can't start his machine while it is in gear, preventing any damage to the driveline and any uncontrolled equipment movements.



Protection against falling objects. Cabin roof windows on all our equipment are fitted with high strength materials which can withstand heavy blows, helping to protect your drivers from falling



Good visibility. Kalmar cabins provide your drivers with excellent visibility, forwards, upwards, sideways and behind them to help them stay safe while in operation.



Keep moving with Kalmar Services

To keep your business moving Kalmar Services offers a range of services that can help you keep your equipment moving optimally.

Kalmar Care

Service models:

Care that keeps your business moving.

With Kalmar Care you get a flexible service that's built around your business. Including, the experience and knowledge of Kalmar's dedicated staff, coupled with transparency and increased predictability of costs.

Kalmar Care is available in three different service models: our two customisable contracts – Essential Care and Complete Care – and our flexible solution On Demand Care.



Essential Care

A maintenance solution to keep your equipment in an optimal condition.



Complete Care

A complete service solution providing piece of mind and maximum equipment uptime.



On Demand Care

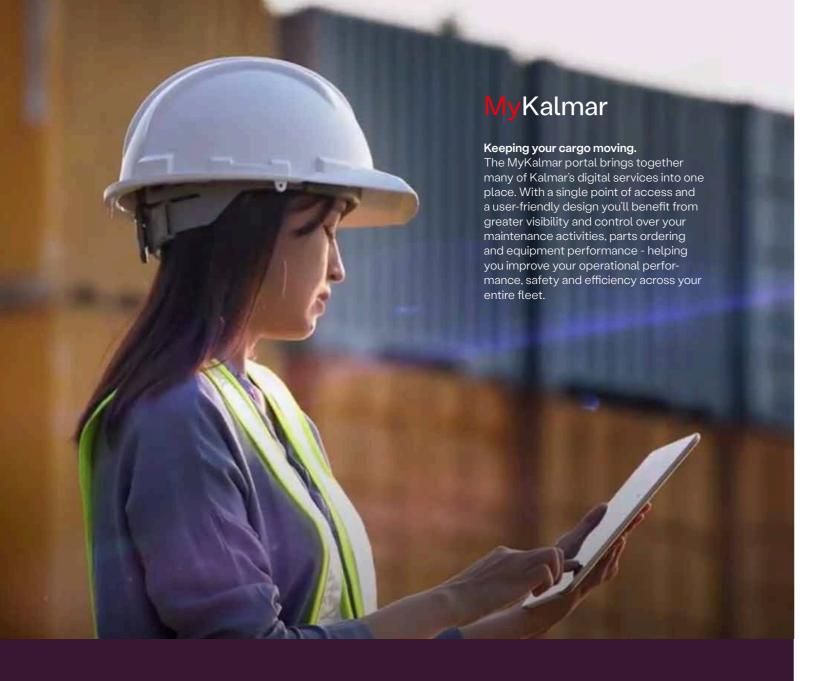
Top-of-the-line service whenever you need it.

Maintenance Planning		•
Preventive Maintenance		•
Predictive Maintenance		•
Corrective Maintenance		•
Preventive Spare Parts	•	•
Corrective Spare Parts		•
ubricants		•
MyKalmar		•
Kalmar Insight		•
Tyre Maintenance		
Battery Maintenance		
•		

henever you need it

Included





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MyKalmar STORE

MyKalmar STORE is your one stop shop for all the parts you need which is accessible through MyKalmar. Open 24/7, accessible on any screen and available in different languages, MyKalmar STORE stocks 100s of thousands of Kalmar Genuine Parts at any given time and we can have them delivered quickly to you, no matter where you are in the world. You can search, order and then track your order all through the same application. MyKalmar STORE has been designed to make your life easier.

Kalmar Insight

Optimise your operations with Insight.

Kalmar Insight* is a performance management tool for cargo handling, which gives you an easy to use overview of your fleet operations, by aggregating data from multiple sources, including equipment built by other manufacturers. Review your entire fleet activities, schedule maintenance activities and order the required parts

automatically. All enabling you to take action on real-time information, that will help improve your overall operations immediately. Kalmar Insight comes fitted and ready to be activated in all new Kalmar equipment, it can also be retrofitted into existing Kalmar equipment or those built by other manufacturers.



*Installation costs and/or an annual subscription fee may app

Kalmar Training

Enhance your skills.

To get the most out of your new machine our training centre offers a range of courses for both your technicians and operators. Operators can be taught how to drive the machine for optimum performance and minimum waste, and to learn what needs to be checked daily for optimal safety. Technicians can be educated with the knowledge they need to keep your new equipment in top condition in a safe way. Courses are a mix of theory and hands-on experience.



Standard

Norms, standards and regulations • Machinery Directive 2006/42/EC

- · Safety Industrial Trucks ISO 3691-1 + EN 16307-1
- Safety Low & High Lift Trucks ANSI / ITSDF B56.1
 Stability Masted Forklift Trucks ISO 22915-1, -2
- · Electrics / Electronics Safety Standard EN 1175
- Electromagnetic Compatibility Directive 2014/30/EC Electromagnetic Compatibility Standard EN 12895
- Noise Emission Directive 2000/14/EC + 2005/88/EC
- Noise Emission Standard EN 12053
 CE-marking (EU/EEA)
- ANSI / ITSDF-marking Forklift Trucks (USA/CAN)
- · AS-marking (Australia)
- UKCA-marking (UK) Supply of Machinery (Safety) Regulations 2008 (UK)

- · Strong, durable heavy-duty box chassis
- Powerful front end unit for drive axle and lift mast fixations
- · Solid tilt cylinder fixations in chassis and mast
- Full access to the entire powertrain with tilting cabin
- Very good visibility in forward, up, sideways and rearwards
- · Low cabin mounting for easy access on
- both sides
- · Lifting eyes and achor points (front & rear)
- Towing pin in rear counter weight (Short model)

- Strong and protective steel mudguards (front /
- Long bottom step between the mudguards (anti-slip) on both sides
- Short access steps (3x) up to the cabin (anti-slip)
- Big rear view mirrors on front mudguards (2x) + 2x in the mast
- Welded lamp brackets bolted on front mudguards (2x)
- Basic noise insulation kit of the forklift

Steer Axle (rear)

- Kalmar steer axle mounted dual pivot bearings.
- Steer axle with mechanical side stops (280-330) · El-servo power steering with double acting
- cylinder
- Steer axle with narrow turning radius
- Steer links of "dog-bone type" (easy to change)

- Kessler D91 planetary axle with differential drive • Maintenance-free oil-cooled Wet Disc Brakes
- Single parking brake, spring loaded & hydraulic
- High pressure filter (10 my) for the brakes
- Drive Axle DCG180-250, Width 3050mm
 Drive Axle DCG280-330, Width 3450mm

- Wheels (Tyres & Rims)

 DCG180-250, Tyres 14.00 x 24" (Rim 10.00 x 24")

 DCG280-330, Tyres 16.00 x 25" (Rim 11.25 x 25" /

- Volvo D8, EU Stage 5 (EPA Tier 4F)
- Cummins 6.7, EU Stage 3 & 5 (EPA Tier 3 & 4F)
- 6-cylinder diesel engines with pre-heater
- · High power & torque with low fuel consumption
- Engine monitoring and protection systems
 Automatic DANA transmissions TE-14400 or Dana
- Transmission monitoring and reverse protection
 Declutch function activated by the brake pressure
- Strong radiators for engine, transmission & brakes
- Muffler and exhaust pipe in steel
 Diesel tank (300-450 lit) incl. breather filter

Load-Sensing Hydraulics

- Load-sensing variable piston pumps (2x) · Power-on-demand with high lift & lowering speeds
- Pumps for mast, spreader, brakes & steering
 Fixed pump for brake pressure & oil cooling
- DCG180-250, Return filter for the work hydraulics
- (1x/10 my)
 DCG280-330, Return filters for the work hydraulics
- Servo filter for the work hydraulics (10 my)
- Pressure filter for hydraulics / brakes (10 my)
- Power steering, power brakes & ORFS-couplings
- Hydraulic oil cooler unit (on RHS)Hydraulic tank (360 lit), cooling, breather filter & ORFS-couplings

- Large selection of mast types and lifting heights. · Duplex Standard; 2-stage mast, with free-visibility
- · Strong, durable mast design (pair of cylinders/ chains)
- · Heavy-duty mast profiles and strong cross members

 Mast with strong mast wheels, bearings & guide
- Large shafts-bearing for mast, strong tilt fixation
 Mast tilt angles +5 / -10 deg (FW / BW)

- · Large selection of carriages types, widths and optionals
- Strong mast wheels, large size bearings and shafts
- Side support quiding unit • Widths; 3000 mm (180-250) / 3400 mm (280-330)

- Fork mountings of roller-type
- Cross sections; (180-250), 250 x 110 mm / (280-330), 300 x 110 mm
- Tapering: standard 0-350 mm full thickness / 350-tip with taper

Electrical System 24V

- · Electric cabinet on chassis, battery box, batteries
- 24V & main power switch

 Electric cabinet, mounted behind driver
- · 2 LED head lights on front fenders (one beam)
- 2 LED working lights on mast (first cross member) • 2 LED working lights rear on cabin (reverse)
- 4 blinker LED-lights (front rear / left right) · 2 tail / 2 brake LED-lights rear in counter weight
- 2 position LED-lights on each side of the truck
- 2 flashing LED-brake lights (when reversing)
- 1 rotating warning LED-beacon • Buzzer when reversing (reverse alarm)

Cabin EGO

Structure

- Spacious, modern cabin with great ergonomy level
- Strong profiles, pillars and cross members
 FOPS certified drivers cabin
- (Fall-Over-Protection-Safety)
- DCG180-330, Tiltable cabin with full access to powertrain & hydraulics
- DCG330-12TH, manual sliding cabin for access to powertrain & hydraulics
- · Large window sections with great visibility in all directions
- · Large access doors with air-damper & key-lock · Doors; sliding windows + access handles

- · Large access doors with air-damper & key-lock
- Doors; sliding windows + access handles
 Drivers seat, mech. spring suspension, high back
- · Comfort seat, adjustable, sensor & 2-point belt
- Electric adjustable work console (up-down/fw-rev) Work console; lift levers, controls, lamp buttons
- Inside rear view mirror (right side)
- Interior lights with fade away function
- Fully adjustable steering wheel incl tilt function · Power steering wheel with steer knob

Controls

- · Electric levers for mast, tilt & fork carriage functions
- · Electric accelerator pedal (hanging)
- Double brake pedals (L + R)
 Multi-function lever LHS (parking brake/travel) direction switch)
- Combined horn and blinker lever
- · Warning hand brake (on/off) leaving seat

- ECHV, electronic controlled heating & ventilation Powerful cab heater, power 10 kW (34.100 Btu)
- · Strong AC cooling unit, power 14.0 kW
- (47.700 Btu) High-capacity ventilation unit - max air flow
- 483 m3/h
- Multiple individual blowers
- (8x upwards / 2x downwards)
- Fresh air and recirculation filter (replaceable) Double wipers / washers on front window
- (larger area) Single wipers / washers on roof and rear windows
- · Interval wiper functions on front, roof and rear windows

Information Systems

- Kalmar CanBus controls with 4,3" monitor
- Danfoss controls DM430E in RAM mount
- Menu controller with toggle wheel & push buttons
 Programmable settings and full monitoring of all

ECO Drive Modes (EDM):

- Power mode
- Normal mode (default setting)

- Economy mode Operator menu:

- System voltage
- Actual gear
- Engine rpm Travelling speed (km/h or m/h)
- Combined hydraulic and brake oil temperature
- Transmission oil temperature Engine oil pressure (Volvo)
- Engine oil pressure only (Cummins) Engine coolant temperature
- Clock and date Operating time (hours)
- Service time indicator (hours)
- Electronic weight scale functions Status of heating system & AC system
- Fuel level (diesel and optional AdRlue) - Est. operating time before empty tank (hour/
- Service indicator Trip computer / statistics

Various warning lights & signals:

- Charging battery
- Low brake pressure
- Failure indicator
- High engine coolant temperature - Low engine coolant level (not on Cummins)
- Low engine oil pressure
- Preheating engine Transmission oil temperature
- Low fuel level (incl AdBlue)

- Hydraulic and brake oil temperature - Low washer fluid level

- Indicator lamps:
- Direction indication
- Parking brake

Fleet Management

Equipped with telemetric hardware for Kalmar Insight

Rims: Iron-Grey RAL 7011

- Cabin: Iron-Grey RAL 7011
- Chassis, tanks & mudguards: Red RAL 3000
 Boom, attachment & axles: Black RAL 7021
- **Documentation and Decals**
- · Load chart inside cabin Machine data sign on chassis incl. load chart
- Warning, tyre pressure & oil pressure stickers Information & levers/joystick stickers

· Maintenance manual

- Fuse diagram Instruction manual
- · Spare parts catalogue

· Kalmar standard warranty: 12 months / 2.000 hours

Options

- Models with standard and short wheelbases
- Anti-slip strips: mudguards, tanks & lamp brackets
- Extra mud flaps (front and rear) Steel grid protections: fender, mast & rear

Wheels (Tyres and Rims)

- · Spare wheels, tyres and rims of various brands
- Diagonal and radial tyres of well known brands
- Diagonals Continental CM+
 Radials: Continental RT20 and Michelin XZM
- · Other brands up on request

Drivetrain

- DANA Automatic transmission TE-17300
- (3+3 gears / no lockup)
 Cummins QSB-6.7-C220 (EU3 / Tier 3. 164-172 kW, 949 Nm, 6.70 l, 6-cyl)
- Cummins QSB-6.7-C260 (EU3 / Tier 3, 194-201 kW, 987 Nm, 6.70 l, 6-cvl)
- Cummins B6.7-C225 (EU5 / Tier 4-Final, 168-188 kW, 1186 Nm, 6.70 l, 6-cyl)

 • DANA Automatic transmission TE-14400
- (4+4 gears / no lockup) Volvo TAD-881-VE (EU5 / Tier 4-Final, 185 kW.
- 1160 Nm, 7.70 l, 6-cyl)
- Auto engine & ignition stop, after 5 min idle Air intake filter, with Pre-Cleaner, raised air intake

• Start/stop function (for Volvo engine only)

- Extra hydraulic function including hoses
- (per function) Push-button hydraulic function via magnet valve
- · Quick release couplings "aerogrip" 1/2" (per function)
- Individual fork positioning including 5th hydraulic function
- Hydraulic accumulator for lifting funciton Hydraulic accumulator for lifting function
- "auto on/off" Separated dual oil tanks including dual oil cooling Working oil tank 270 lit / brake oil tank 90 lit

Hydraulic oil heater 1 kW (single or double) • Other Tilt angles up on request

- Lifting Mast
 Duplex Standard (no FL); lift heights
- Duplex Freelift (full FL); lift heights 3.00 7.00 m
 Triplex Freelift (full FL); lift heights 4.50 7.00 m
 Simplex (no FL); lift heights 1.50 4.00 m
- · Other lift heights / closed heights upon request
- DCG180-250: Sideshift/fork positioning: width 3.20 / 3.50 / 3.80 / 4.00 m
- DCG280-330: Sideshift/fork positioning: width 3.00 / 4.05 / 4.20 m
- DCG180-250: Low model of SS/FP-carriage: width
- DCG180-330: Sideshift/fork position + center levelling: width 3.00 4.00 m Attachments: carriage sides, chain brackets & hoses
- Attachment of various brands for factory integration

· Other carriage width upon request

- · Large selection of fork dimensions, tapering and
- designs
 See fork dimensions under Specifications Length: 2400 up to 3000 mm in steps (special)
- · Other cross sections upon request · Tapering: various optional tapering / short or
- Fork Shaft System; hook-on type / forks, coil ram or attachment · Fork Shaft System; pin-type / forks, coil ram or attachment
- Kissing forks with chamfer inside/outside (integral roller-type) Kissing forks with chamfer inside/outside (FSS hook-on type) · Hydraulic levelling fork (up/down) on left fork

or / and right fork

Attachment

- · Various attachments available

 - Inverted forks
- Coil ram - Rotator
- Load stabilizer
- Steel magnet
- Spreader
- Mounting of attachments - Other attachments up on request

- Electrical System (24V) Tuner FM-AM, RDS, MP3, USB, Bluetooth, Stream
 Tuner FM-AM, RDS, MP3, USB, Bluetooth,
- Stream / DAB
- Power sockets: 2x24V and 2x12V (in door columns)
 Power sockets: 2x24V / 1x12V / 2xUSB 5V
- Electric air pressure horn
- Reverse alarm (beeping or white noise multi frequency)
 • Protection against chain slack (electronics)

· Mast with automatic vertical function (auto-tilt)

- 2 extra LED working lights in mast (FW)
- 2 extra LED working lights rear on cabin (FW) 4 extra LED working lights rear on cabin (mix)
- · 6 extra LED working lights rear on cabin (mix)
- 2 extra LED working lights front on cabin roof • 1 extra LED working lights - between tilt cylinder
- · 2 high/low beam Halogen working lights (repl LED) 1 LED rotating warning beacon (on adjustable pole LHS)
- Red safety light, rearward or forward
 Red safety zone light, Left and Right direction Rotating beacon LED, activated via reverse gear · Other combination up on request

Blue safety light, rearward or forward

- Safety functions
- Overload indication for lift/tilt incl. speed restriction Speed limitation; default 15 km/h
- (set by technician)

 Speed limitation at specified load (set by technician) Speed limitation at specified lift height
- (set by technician) Speed restriction set by customer in display;
- default 15 km/hv Tyre pressure monitoring system (TPMS / Bluetooth)
- · Alcolock Draeger in cabin
- Structure • Globetrotter cabin +200 mm higher, roof 12 mm (repl 6 mm), (not DCG330-12TH)
- Elevated cabin 300 mm (not DCG330-12TH) · Sliding cabin to the right side hydraulic power (only
- DCG330-12TH) • Sliding cabin to the right side (hydraulic power / +375mm) (not DCG330-12TH)
- Rotatable Driver Seat, electric 180 deg (to the left)
- · Steel grid protection for front window Steel grid protection for roof window · Door opening holder (left side and / or right side)
- Flat front window with steel profiles, tinted and · Roof window 12 mm (repl standard 6 mm) · Electric cabin tilt pump (up/down), (Not

• Turnable Driver Seat, manual 55 deg (to the right)

DCG330TH) Electric heated mirrors, front fender/standard pos

• External cabin reverse mirrors (2x)

· Electric heated + adjustable mirrors, front mudguards Comfort

Extended seat backrest

· Air cusioned driver seat with horizontal suspension

• External cabin reverse mirrors (2x) with heating

· Headrest for driver's seat · Armrest adjustable left side Seat heating

laminated

· Seat cover in vinyl

· 3-point seat belt

- · Leather reinforced seat, high backrest, 3-point belt and heating Grammer Actimo XL, air cushion, heating,
- high back, 2-point belt
 BE-GE 3100, air cushion, heating, airvent, high back, 2-point belt, leather reinforced seat · Isringhausen 6830KA/880, air cushion, heating, high back, 2-point belt
- · Extra trainer seat incl. 2-point belt · Bracket for terminal and monitor (RHS)

Controls

- Travel direction button on 1st lift lever (F-N-R)
- Electronic joystick (EGO)
- Electronic lever steering (without feedback)
 Electronic mini-wheel steering (no feedback)

Sun visors front, roof and rear windows

- ECC, electronic heating, cooling (AC) & ventilation
- Tinted windows including laminated front window

- Additional Equipment
- Enhanced Safety Package - Speed limitation default 15 km/h or free (set by
- technician) · Blue safety light backwards via back alarm
- Rear warning radar (for reverse camera/monitor in cabin)
- Seat belt interlock (active before driving seatbelt on) Semi-automatic fire suppression system
- (DAFO Forrex)

cabin)

- · Fire extinguisher 6 kg, powder (LHS / behind foot steps) Tool kit
- Central greasing system (14-18-24 grease points)
- Tilt indicator of mechanical type Tilt indicator of electronic type (in display)
- · Electronic weight indicator in cabin control monitor Heat protection kit (incl hoses) Heat protection mechanical kit
- Wheelnut protection
 Additional equipment for roadtraffic (LGF-sign)
- Modular full HD solutions (1920x1080p)
 Extra front mast camera to cab monitor • Extra front carriage camera - to cab monitor

• DVR recorder, up to 4 channels, with SD-card (128

360 birdview camera solution (not with sliding

Radar warning sensors rear (2x) to cab monitor
Monitor 7in Quad, max 4 connections (repl Dual) Monitor 10in Quad, max 4 connections (repl Dual)

Information Systems

VDI - Vehicle Data Interface

- Fleet Management (Kalmar Insight) Kalmar Insight licence (only certified countries)
 Kalmar Insight Driver Monitor (RFID reader + 10)
- driver tags) Kalmar Insight extra driver tags (10 tags)

• Other RAL colour than standard, chassis Special and multiple colours, chassis

· Extra set of documentation

 Other colour than standard, striping foil · Reinforced anti-corrosion protection **Documentation & Decals**

information

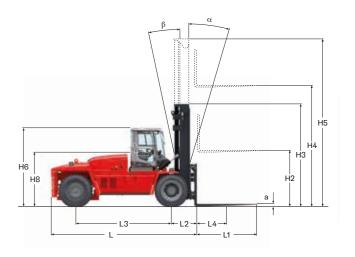
- Workshop manuals Load chart lbs/inch in cab & sign "no riders" · Documentation on memory stick
- · Training packages (driver, service, maintenance, software) Contact Kalmar Training Centre for more
- · Additional warranty packages available: - Gold (complete forklift): max 5 yr/10.000h
 - Silver (drive line): max 8 yr/16.000h Bronze (structural parts): max 10 yr/20.000h

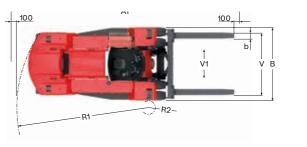
· Contact Kalmar for more information

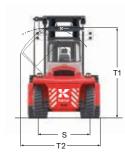
Specifications

ار الح الح	Models					DCG200-12	DCG220-12	DCG250-12S	DCG250-12		
MODELS LIFTING CAPACITY		Rated capacity		kg	18 000	20 000	22 000	25 000	25 000		
ĭ⊒ĕ		Load centre distance	L4	mm	1200	1200	1200	1200	1200		
FORKLIFT DIMENSIONS		Truck length (to fork face front)	L	mm	6090	6090	6090	6090	6340		
		Distance, centre drive axle - fork face front	L2	mm	1070	1070	1070	1070	1070		
		Wheelbase	L3	mm	4000	4000	4000	4000	4250		
		Truck width (over tyres)	В	mm	3050	3050	3050	3050	3050		
E N		Roof height cabin (basic forklift)	Н6	mm	3290	3290	3290	3290	3290		
		Seat height EGO	Н8	mm	2150	2150	2150	2150	2150		
Ė		Height / width, max (with tilted cabin)	T1/T2	mm	3800/3700	3800 / 3700	3800/3700	3800/3700	3800/3700		
JRK		Track (c-c), front / rear	S1/S2	mm	2200 / 2200	2200 / 2200	2200 / 2200	2200 / 2200	2200 / 2200		
Ä		Turning radius, outer / inner	R1/R2	mm	5600 / 425	5600 / 425	5600 / 425	5600 / 425	5875 / 550		
		Aisle width min, at 90° driving with forks	A1	mm	9270	9270	9270	9270	9550		
		Ground clearance, min		mm		300		30	00		
	Duplex Standard	Lifting height ¹	H4	mm	5000	5000	5000	5000	5000		
Ę		Mast height, min	H3	mm			4320				
LIFTING EQUIPMENT		Mast height, max	H5	mm			6820				
JUE JUE		Mast tilt, forward – backward	а – В	0			5/10				
G E(Forks	Width x Thickness	bxa	mm			250 x 110				
Z F		Length	l	mm		2400					
=		Forks position, outside width, min-max.	V	mm			2700 / 800				
		Forks sideshift, max stroke at opening (c-c) ²	V1 – V	mm			557 / 1585				
		Fork carriage width ⁴	b3				3000				
s	Service weight ³			kg	28 500	29 800	31200	33 400	32 900		
WEIGHTS	Axle load	Unloaded		kg	15 000	15 000	15 000	15 000	15 500		
WEIG	front	At rated load		kg	43 200	46 300	49 500	54 200	53 900		
	Axle load	Unloaded		kg	13 500	14 800	16 200	18 400	17 400		
	rear	At rated load		kg	3 300	3 500	3 700	4 200	4 000		
(O	Wheels	Number of wheels, front – rear (x = driven)					4 – 2				
WHEELS	Tyres	Pneumatics, type / pressure (front - rear)					Diagonal / 1.0				
×		Dimensions, front – rear		tum		14	.00×24" - 14.00×	24"			
	Rims	Dimensions, front – rear		tum	10.00x24" - 10.00x24"						
	Steer axle	Manufacturer, type - designation			Kalmar st	teer axle / Powe	er steering / dou	uble acting single	e cylinder		
တ	Drive axle	Manufacturer, type - designation			ŀ	Kessler D91-PL4	89 Differential a	nd hub reductio	n		
AXLES	Service brakes	Type – affected wheels			Oil cooled wet disc brakes (WDB) / drive wheels						
	Parking brake	Type – affected wheels			Single dry disc / spring activated - hydraulic release / drive wheels						
	Hydraulics	System type / pump type			L	oad-sensing / p	ower-on-demar	nd / piston pump	os		
HYDRAULICS	Oil pressure	Max working pressure		MPa	16.5	18.0	20.0	22.0	22.0		
ORA	Tank	Oil volume		Lit			360				
H		Fuel tank, capacity		Lit		300		300	375		
		AdBlue tank, capacity		Lit			35				

DCG280-12S	DCG280-12	DCG300-12S	DCG300-12	DCG330-12S	DCG330-12
28 000	28 000	30 000	30 000	33 000	33 000
1200	1200	1200	1200	1200	1200
6675	6925	6675	6925	6675	6925
1140	1140	1140	1140	1140	1140
4500	4750	4500	4750	4500	4750
3430	3430	3430	3430	3430	3430
3450	3450	3450	3450	3450	3450
2300	2300	2300	2300	2300	2300
3800/3800	3800/3800	3800/3800	3800/3800	3800/3800	3800/3800
2440 / 2540	2440 / 2540	2440 / 2540	2440 / 2540	2440 / 2540	2440 / 2540
6450 / 825	6650 / 950	6450 / 825	6650 / 950	6450 / 825	6650 / 950
10100	10325	10100	10325	10100	10325
30	00	30	00	30	00
5000	5000	5000	5000	5000	5000
		45	20		
		70	20		
		5/	10		
		300	x 110		
		24	00		
		3150	/ 850		
		625 /	1900		
		34	00		
38 800	38 300	40 200	39 500	42 200	41500
20 000	20 500	20 000	20 500	20 000	20 500
62 600	62 300	65 600	65 300	70 200	69 800
18 800	17 800	20 200	19 000	22 200	21 000
4 200	4 000	4 600	4 200	5 000	4 700
		4 -	- 2		
		Diagor	nal / 1.0		
		16.00×25"	- 16.00×25"		
		11.25×25"/2.0	- 11.25x25"/2.0		
ŀ	Kalmar steer axle	e / Power steerir	ng / double actir	ng single cylinde	r
	Kessler I	D91-PL489 Diffe	rential and hub re	eduction	
	Oil coole	ed wet disc brak	es (WDB) / drive	e wheels	
S	Single dry disc / s	spring activated	- hydraulic relea	se / drive wheel	S
	Load-sen	sing / power-or	n-demand / pisto	on pumps	
19.5	19.5	20.5	20.5	22.0	22.0
		36	30		
380	450	380	450	380	450
		3	5		







- Notes:
 1. Technical data: mast Duplex Standard with 5000 mm lift height.
 2. Technical data: fork carriage with integral sideshift / fork position (SSFP).
 3. Service weights / axle loading: values with standard configuration.
 4. Other fork carriages upon request.

Performance

DEL	All wheelbases (standard and short) Cummins engine			DCG180- 12	DCG200- 12	DCG220- 12	DCG250- 12	DCG280- 12	DCG300- 12	DCG330- 12
ĭ				QSB6.7-0	C220 (EU St	age IIIA / El	PA Tier 3)	QSB6.7-C260 (EU Stage IIIA / EPA Tier 3)		
S	Travel speed, forward - reverse	Unloaded / at rated load	km/h		28 - 26 /	′ 26 - 23		28 - 26 / 26 - 23		
SPEEDS	Lifting speed	Unloaded / at rated load 70%	m/s		0.39 /	0.37		0.37 / 0.35		
SP	Lowering speed	Unloaded / at rated load	m/s		0.34 / 0.40			0.32 / 0.40		
	Gradeability, max	Unloaded	%	74	69	65	60	67	64	60
딾		Rated load	%	38	35	32	29	33	31	29
POWER	Gradeability, at 2 km/h	Unloaded	%	51	48	44	41	48	46	43
<u>م</u> ا		Rated load	%	28	26	24	22	24	23	21
	Drawbar pull		kN		17	.3		218		
ð	Noise level, inside (with EDM¹) EN12053, LpAZ		dB(A)	72 - 75				72 - 75		
SOUND	Noise level, outside (with ${\sf EDM^1}$)	EN12053, LWAZ	dB(A)	103 - 106			103 - 106			
SC	Noise level, outside (with EDM1)	2000/14/EC, LWAZ	dB(A)	106 - 109			106 - 109			

MODEL	All wheelbases (standard and short)				DCG200- 12	DCG220- 12	DCG250- 12	DCG280- 12	DCG300- 12	DCG330- 12
ž	Cummins engine			B6.7-C22	5 (EU Stage	eV/EPAT	ier 4-Final)	B6.7-C225 (E	U Stage V / EP	A Tier 4-Final)
SC	Travel speed, forward - reverse	Unloaded / at rated load	km/h		28 - 26	/ 26 - 23		2	28 - 26 / 26 - 2	3
SPEEDS	Lifting speed	Unloaded / at rated load 70%	m/s		0.39	/ 0.37		0.37 / 0.35		
S	Lowering speed	Unloaded / at rated load	m/s	0.34 / 0.40			0.32 / 0.40			
	Gradeability, max	Unloaded	%	91	84	78	72	61	59	55
监		Rated load	%	45	41	38	35	31	30	27
POWER	Gradeability, at 2 km/h	Unloaded	%	60	56	53	49	43	41	39
Ξ		Rated load	%	33	30	28	26	23	22	20
	Drawbar pull		kN	180	180	180	180	197	197	197
₽	Noise level, inside (with EDM1)	EN12053, LpAZ	dB(A)	72 - 76				72 - 76		
SOUND	Noise level, outside (with ${\sf EDM^1}$)	EN12053, LWAZ	dB(A)	103 - 106			103 - 106			
S	Noise level, outside (with EDM¹) 2000/14/EC, LWAZ dB(dB(A)	106 - 109				106 - 109		

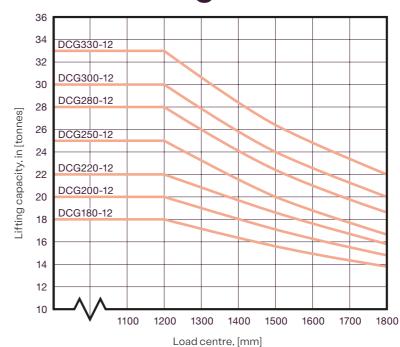
All wheelbases (standard and sho	All wheelbases (standard and short)		DCG180- 12	DCG200- 12	DCG220- 12	DCG250- 12	DCG280- 12	DCG300- 12	DCG330- 12
Volvo engine			TAD-881-\	/E (EU Stag	je V / EPA T	ier 4-Final)	TAD-881-VE (EU Stage V / E	PA Tier 4-Final)
Travel speed, forward - reverse	Unloaded / at rated load	km/h		28 - 26	/ 26 - 23			28 - 26 / 26 - 2	23
Travel speed, forward - reverse Lifting speed	Unloaded / at rated load 70%	m/s		0.44	/ 0.41		0.38 / 0.37		
Lowering speed	Unloaded / at rated load	m/s	0.34 / 0.40		0.32 / 0.40				
Gradeability, max	Unloaded	%	144	127	113	101	83	78	72
Ŧ	Rated load	%	58	53	49	44	39	37	34
Gradeability, at 2 km/h	Unloaded	%	78	73	68	63	54	52	49
	Rated load	%	40	37	35	31	28	27	25
Drawbar pull		kN	180	180	180	180	240	240	240
Noise level, inside (with EDM¹)	Noise level, inside (with EDM¹) EN12053, LpAZ dB(A)		72 - 75			72 - 75			
Noise level, inside (with EDM¹) Noise level, outside (with EDM¹) Noise level, outside (with EDM¹)	EN12053, LWAZ	dB(A)		103 - 106 106 - 109				103 - 106	
Noise level, outside (with EDM ¹)	2000/14/EC, LWAZ	dB(A)				106 - 109			

Drivetrain

ELS	Models		DCG180-250	DCG280-330	DCG180-330	DCG180-330		
MODELS	Wheelbase	mm	4000 - 4250	4500 - 4750	4000 - 4750	4000 - 4750		
	Drive motor, manufacturer - type designation ¹		Cummins QSB6,7-C220	Cummins QSB6,7-C260	Cummins B6,7-C225	Volvo TAD-881-VE		
	Fuel types, motor type		Diesel / HV	O / 4-stroke	Diesel / HV	O / 4-stroke		
	Turbo charger / cooling		Turbo (FGT)	+ Intercooler	Turbo (VGT) + Intercooler	Turbo (FGT) + Intercooler		
	Engine after treatment type ²		No AdBlue, DOC, SCR or DPF	No AdBlue, DOC, SCR or DPF	With AdBlue, DOC and ASC	With AdBlue, DOC and ASC		
¥	Diesel particle filter (DPF)		No DPF	No DPF	With DPF	With DPF		
ENGINE	Emission standards		EU Stage IIIA / EPA Tier 3	EU Stage IIIA / EPA Tier 3	EU Stage V / EPA Tier 4-Final	EU Stage V / EPA Tier 4-Final		
	Rated power / at revs (ISO 3046)	kW/rpm	164 / 2200	194 / 2200	168 / 2200	185 / 2200		
	Peak power / at revs (ISO 3046)	kW/rpm	172 / 2000	201/2000	188 / 1800 - 1900	185 / 1600 - 2200		
	Peak torque / at revs (ISO 3046)	NW / rpm	949 / 1500	987 / 1500	1186 / 1300	1150 / 1400		
	Number of cylinders / displacement	lit (in2)	6 / 6.702 (408)	6 / 6.702 (408)	6 / 6.702 (408)	6 / 7.700 (470)		
	Fuel consumption, normal driving ³	lit/h	9 - 12	13 - 15	9 - 15	9 - 15		
	AdBlue consumption, normal driving	%	-	-	4 - 6	4 - 6		
	Manufacturer's type designation		Dana TE-17300	Dana TE-17300	Dana TE-17300	Dana TE-14400		
O	Clutch, type		Torque c	onverter	Torque o	onverter		
AIS.	Gearbox, type		Hydrodynam	ic Powershift	Hydrodynam	ic Powershift		
8	Eco Drive Mode (EDM) drivetrain settings ³		3 modes / Eco,	Normal & Power	3 modes / Eco,	Normal & Power		
GEAROX & MISC	Numbers of gears, forward / reverse	gears	3/3	3/3	3/3	4 / 4		
ËĀ	Alternator, type / power	W	AC / 1960 (28V x 70A)	AC / 1960 (28V x 70A)	AC / 1960 (28V x 70A)	AC / 3080 (28V x 110A)		
ര	Starting battery, voltage / capacity	V / Ah	2×12 / 145	2×12 / 145	2×12 / 145	2x12 / 145		
	Driving axle, manufacturer / type		Kessler D91-PL489 / drive axle with differential and hub reduction					

- Notes:
 1. Regular diesel based on EN590
 (ASTM D975 no. 2-D)
 Synthetic / paraffinic diesel based on EN 15940.
- 2. AdBlue / Diesel Exhaust fluid (DEF) doser unit Diesel Oxidation Catalyst (DOC) Diesel Particulate Filter (DPF) Selective Catalyst Reduction (SCR) Ammonia Slip Catalyst (ASR).
- 3. With Eco Drive Mode (EDM) drivetrain settings included. Eco (1600 rpm), Normal (1800 rpm) and Power (2200 rpm).

Load diagram*



* Full capacity with lift height 7.00 m, masts Simplex, Duplex Standard and Duplex Freelift, carriage Sideshift / Forkposition (SS/FP) and with / without Fork Shaft System.

Notes:
1. With Eco Drive Mode (EDM) drive train settings included: Eco (1600 rpm), Normal (1800 rpm) and Power (2200 rpm).

Lifting equipment

We offer a full range of duplex, triplex and free-lift equipment.*

		DCG18	30-250			DCG28	0-330			
	Lift Height	Mast I	leight	Free Lift	Lift Height	Mast H	leight	Free Lift		
	H4	H3 min	H5 max	H2	H4	H3 min	H5 max	H2		
	3000	3320	4820	-	3000	3520	5020	-		
	3500	3570	5320	-	4000	3770	5520	-		
DUPLEX STANDARD (2-stage)	4000	3820	5820	-	4000	4020	6020	-		
N P	4500	4070	6320	-	4500	4270	6520	-		
EX STANE (2-stage)	5000	4320	6820	-	5000	4520	7020	-		
2-s	5500	4570	7320	-	5500	4770	7520	-		
<u> </u>	6000	4820	7820	-	6000	5020	8020	-		
겁	6500	5070	8320	-	6500	5270	8520	-		
	7000	5320	8820	-	7000	5520	9020	-		
	7500	5570	9320	-	7500	5770	9520	-		
	8000	5820	9820	-	8000	6020	10020	-		
	9000	6320	10820	-	9000	6520	11020	-		
	10000	6820	11820	-	10000	7020	12020	-		
		DCG18	30-250			DCG28	80-330			
	Lift Height	Mast I	leight	Free Lift	Lift Height	Mast H	leight	Free Lift		
	H4	H3 min	H5 max	H2	H4	H3 min	H5 max	H2		
	3000	3420	4920	1500	3000	3620	5120	1500		
	3500	3670	5420	1750	3500	3870	5620	1750		
DUPLEX FREELIFT (2-stage)	4000	3920	5920	2000	4000	4120	6120	2000		
ge)	4500	4170	6420	2250	4500	4370	6620	2250		
.EX FREE (2-stage)	5000	4420	6920	2500	5000	4620	7120	2500		
	5500	4670	7420	2750	5500	4870	7620	2750		
B	6000	4920	7920	3000	6000	5120	8120	3000		
	6500	5170	8420	3250	6500	5370	8620	3250		
	7000	5420	8920	3500	7000	5620	9120	3500		
	8000	-	-	-	8000	-	-	-		
	9000	-	-	-	9000	-	-	-		
	10000	-	-	-	10000	-	-	-		
		DCG18	80-250			DCG28	0-330			
REELIFT 3e)	Lift Height	Mast I	leight	Free Lift	Lift Height	Mast Height		Free Lift		
REE (96)	H4	H3 min	H5 max	H2	H4	H3 min	H5 max	H2		
:X F -sta	4550	3500	6350	1700	4625	3680	6630	1625		
PE 8	5150	3700	6950	1900	6000	4130	8010	2100		
TRIPLEX FRE (3-stage	6500	4150	8300	2350	6900	4430	8910	2400		
	6950	4300	8750	2500	-	-	-	-		
		DCG18	80-250		DCG280-330					
	Lift Height	Mast I	leight	Free Lift	Lift Height	Mast F	leight	Free Lift		
ᇤ	H4	H3 min	H5 max	H2	H4	H3 min	H5 max	H2		
X LI (ge)	1500	3550	3550	-	1500	3550	3550	-		
SIMPLEX LIFT (1-stage)	2000	4050	4050	-	2000	4050	4050	-		
E E	2500	4550	4550	_	2500	4550	4550	-		
- 0,	3000	5050	5050	-	3000	5050	5050	-		
	3500	5550	5550	-	3500	5550	5550	-		
	4000	6050	6050	-	4000	6050	6050	-		

- Notes:*

 1. Other lift heights up on request.

 2. Mast heighs H3 and H5 in standard configuration (may change with tyre dimensions).

 3. Duplex Freelift with lift cylinders and lift chains outside the mast profile.

 Triplex Freelift with lift cylinders and lift chains outside the mast profile.

 Simplex with lift cylinders and lift chains outside the mast profile.



Duplex Standard Lift height 3000 - 10000 mm



Duplex Freelift Lift height 3000 - 7000 mm



Triplex Freelift Lift height 4500 - 7000 mm



Carriage sideshift / fork positioning



Carriage with kissing forks for steel handling



Carriage for Sideshift / Fork position (SS/FP) and Centre Levelling



Fork shaft system (Hook on type or roller type)



Coil ram



Forks with roller bearings (SS/FP) and fork levelling



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