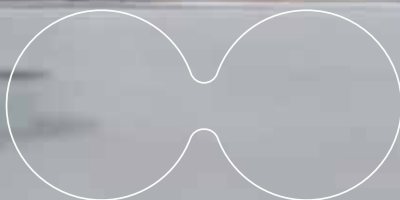




# Medium Forklift

DCG100-180



# Greater lifetime savings

Keeping cargo moving forward is obviously of critical importance. Meanwhile, the performance of your forklift-and-driver teams has the most significant impact on cargo handling operations – both day-to-day and over time. That's because forklift-and-driver teams directly influence your ability to keep promises, generate future revenue as well as increase lifetime savings.

## Introducing the Kalmar DCG100 -180







Like all Kalmar solutions, the Kalmar DCG100-180 forklift offer greater total lifetime savings by improving the performance of your truck-and-driver teams. The DCG100-180 is a range of Kalmar trucks with a lifting capacity of 10-18 tonnes. Each model in the range is designed, built and delivered to keep truck uptime and driver productivity levels high – and keep running, maintenance and lifetime costs low.

## Delivering savings


It's simple: great truck-and-driver teams save your company time and money every working day – and over the lifetime of your business. The DCG100-180 is designed, built and delivered to offer greater total lifetime savings – capitalising on insights from Kalmar's proven track record of producing more than 50,000 machines over the last 75 years, and over 12,000 G-Generation machines.. The DCG100-180 offers superior truck uptime as well as fuel and maintenance savings. As important, it incorporates the best driving environment in any lift truck – our new EGO cabin – loaded with features that inspire driver productivity, efficiency and safety.

## Total lifetime savings

The following factors contribute to achieving total lifetime savings while owning, operating and maintaining a forklift. Every Kalmar DCG100 -180 forklift helps you meet them all.

-  Forklift-and-driver productivity
-  Operational savings
-  Maintenance savings
-  Wear and spare part savings
-  Resale value
-  Purchase optimisation.



 Save your company time and money every working day.





Ensuring high uptime levels.



# Increased productivity

Ensuring cargo is handled in perfect condition and on time. It's the base for keeping your promises and generating revenue. Meanwhile, ensuring your driver can uphold delivery precision is dependent upon your forklift availability. Here are some of the ways the DCG100 -180 ensures high uptime levels.

## Two new diesel engines

The Kalmar DCG100-180 offers you the choice of both EU Stage IIIA and Stage V (EPA Tier 3 and Tier 4-Final) emission compliant engines. All combinations can run on regular diesel and synthetic diesel (like HVO). Volvo and Cummins cut particulate matters (PM) with 92% and cut nitrogen oxides (NOx) with 89%, when comparing EU Stage IIIA and Stage V (T3 vs T4F) engines. Both engines improve fuel efficiency whilst maintaining operational reliability, durability or performance. As important, both engines ensure maximum power and torque are available at low rpms.



### Cummins QSB6.7 / B6.7 ratings:

EU Stage IIIA (EPA Tier 3):  
max power 133 kW / max torque 800 Nm.

EU Stage V (EPA Tier 4-Final):  
max power 129 kW / max torque 1120 Nm.

EU Stage V (EPA Tier 4-Final):  
max power 188 kW / max torque 1186 Nm.

6-cylinder / volume 6,70 lit (408 in3)



### Volvo TAD-582-VE rating:

EU Stage V (EPA Tier 4-Final): max power  
160 kW / max torque 910 Nm.

4-cylinder / volume 5,10 lit (313 in3)

## Powerful hydraulics

The variable pumps automatically sense the load in every operation and adjust the oil flow accordingly, allowing for faster lifting cycles while reducing fuel consumption. New electric and load-sensing hydraulic systems (power-on-demand) mean quicker response, high lifting speed and increased control. This combination helps drivers be more productive while using less fuel.

## Boosting uptime

The improved electronic system of the DCG100-180 is a fast, intelligent and stable system that makes the forklift user-friendly and reliable. The electronics requires far fewer connection points and cables, which means fewer faults and improved operational reliability. The electronics also incorporate a modern, distributed and redundant CAN-bus (Controller Area Network) that ensures reliability. It monitors the condition and performance of the engine, gearbox, valves and more: controlling 500 measuring points, 50 times every second. This keeps the forklift and its engine components operational even in the worst-case scenario. The CAN-bus constantly provides condition-monitoring data via a 7" colour display that is placed at eye level in the cabin – so the driver can make well-informed decisions.

## Keeping clean and cool

A cooling system improves uptime and operational reliability of the DCG100-180. It helps keep the engine compartment cooler, thus promoting a longer lifetime of engine, hydraulic and electrical components. We offer an optional reversible cooling fan that helps keep the radiator clean from potentially harmful dirt, dust or particles. A perfect option for sawmills or other dusty applications.

\* Engines with other emission standards available.



# Operational cost savings

As you know, no two drivers are identical. This is especially true when it comes to fuel consumption, driving safety and accident avoidance. Of course, even the best driver needs a great truck to help keep these costs low. A range of new features makes it easy to drive the DCG100-180 economically and safely – securing savings throughout every shift.

## Reducing fuel consumption

Compared to our previous model, the DCG100-180 uses up to 15 percent 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.

## All the power, 20% less fuel

To reduce the fuel consumption further we can offer the DCG100-180 with an optional drive axle and converter. The drive axle and converter is optimised to match the engine's performance and use the engine to its fullest. A lower rpm and an optimised gear ratio lowers the fuel consumption by up to 20% and makes the machine quieter to operate without losing any performance.

## Eco Drive Modes

Choose between three optional 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%**



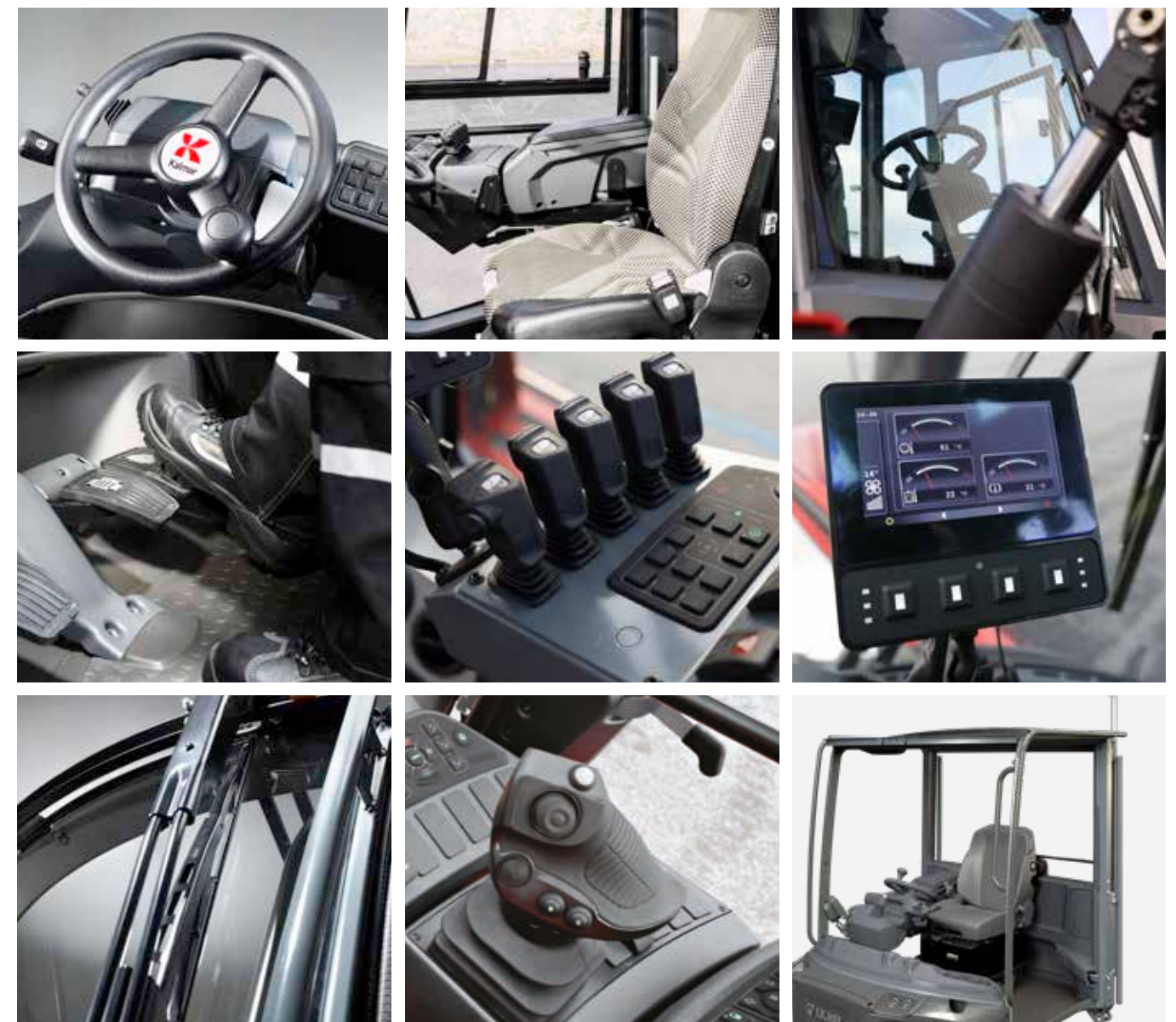


# Ergonomic excellence



**The DCG100 -180 offers your drivers Kalmar's most productive driving environment – our EGO cabin. The EGO cabin provides a great working environment, ergonomic excellence and many productivity enhancing features.**

The EGO cabin incorporates a spacious curved front window that gives the operator excellent side-to-side and overhead visibility. Operators gain greater operating control and precision thanks to well placed, ergonomically improved instruments, levers, pedals, panels, switches and display. A closer look shows why the DCG100 -180 is such a great working environment. One test drive will prove it.



#### **Ergonomic steering wheel.**

Here's an ergonomic twist: EGO's steering wheel is not only adjustable; it can also be tilted to the side. This decreases stress while driving and reversing. Thoroughly tested, it raises the ergonomics bar.

**Comfort pedals.** A flexible and safe pedal system gives an adjustable pedal angle. The ergonomics minimises strain on the operator's foot. A floor-based solution that gives a hanging pedal feel.

**Climate package.** Complete and flexible climate control system that matches the highest demands. Large air intake, easy filter replacement in the front, well-dimensioned and designed components provide complete driving comfort and convenience.

**Ergonomic multi-seat.** The rotatable and fully integrated Kalmar seat. Designed and developed for maximum sitting posture, comfort and ergonomics for long shifts and demanding operations.

**Operating console.** The complete unit for those who use the optional mini steering wheel, steering lever, or integrated switch knob. Fully adjustable and individually tested for optimal ergonomics. The steering wheel can be tilted forward without limiting visibility.

**The optional joystick** with built-in gear knob is designed to improve driving efficiency. It is optimised for maximum lifting capacity and ergonomically enhanced to reduce arm fatigue.

**Optimised visibility.** An open design with smart profiles and curved front and rear windows. Provides optimised views at all angles, with exceptional views diagonally forwards and backwards.

**Work console.** A natural extension of the driver's arm. Easy to set, adjust, and use. Ergonomic and flexible. Here are all the necessary controls, switches, levers and indicators for effective operations. Clear, well-placed panels. Steering wheel controls for data display as well as the whole control system.

**Overhead guard.** The EGO cabin is also available as an overhead guard. A simpler, more robust alternative that provides great visibility, safety and ergonomics. Durable and robust for all kinds of weathers.



# Features and options



**Kalmar attachments.** Choose between a wide range of forks and attachments for different applications. We offer complete solutions whereby we assemble the attachment in the factory and integrate it with the truck's other functions.



**Heavy duty lift equipment.** Our long experience of extreme applications all over the world has gained us knowledge to optimise our lifting equipment. Kalmar's lifting equipment is by far the most heavy duty lifting equipment available on the market.



**Engine options.** Kalmar offers the DCG100-180 with a number of different engine options for regulated and non-regulated markets. Engines from both Volvo and Cummins are available in different ratings.



**ECO drive axle option.** A lower rpm and an optimised gear ratio lowers the fuel consumption by up to 20% and makes the machine quieter to operate without losing any performance.



**Load sensing hydraulics.** The variable pumps automatically sense the load in every operation and adjust the oil flow accordingly, allowing for faster lifting cycles up to 40 percent while reducing fuel consumption. This will improve your productivity a lot depending on number of lift cycles.



**Temperature control fan.** A new cooling system improves uptime and operational reliability of the DCG100-180. It helps keep the engine compartment cooler, thus promoting a longer lifetime of engine, hydraulic and electrical components. We offer an optional reversible cooling fan that helps keep the radiator clean from potentially harmful dirt, dust or particles. A perfect option for sawmills or other dusty applications.



**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.

## Forestry industries

With our medium diesel forklift you will be able to handle most loads both indoors or out, including lumber packages, pulp, paper, board and waste. Moving raw materials off trucks or train trays, to moving wood around during the milling process or lifting and moving final goods ready for dispatch.



## Metal industry

Our heavy diesel powered forklifts can lift, stack and transport metal slabs, blooms 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.



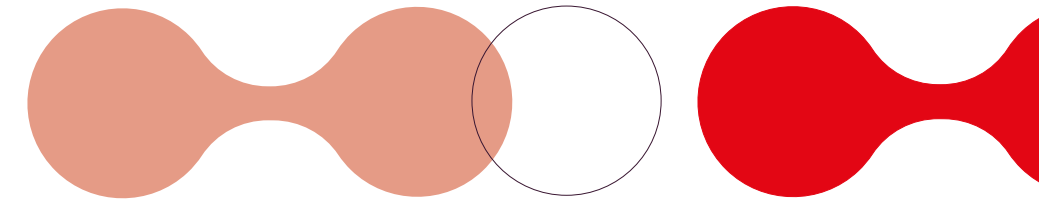
## Concrete, Energy and Heavy Industry

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 and blades can also be lifted and moved safely and efficiently.



## Logistics and stevedoring

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.





# Safety fitted as standard

## All Kalmar equipment is compliant with EN 1175:2020.

At Kalmar, the safety of people working with our machines is always at the top of our minds, which is why meeting global safety standards is important to us. The safety standard EN 1175:2020, which sets the electrical and electronic component standards for industrial trucks, has been updated to improve the safety of these machines while in operation. This update is valid from April 2023. All Kalmar counter balanced machines, including reachstackers, empty container handlers and forklifts have been updated to meet this new standard to ensure that working with a Kalmar machine is as safe as it can be.

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 load-handling 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 objects.



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





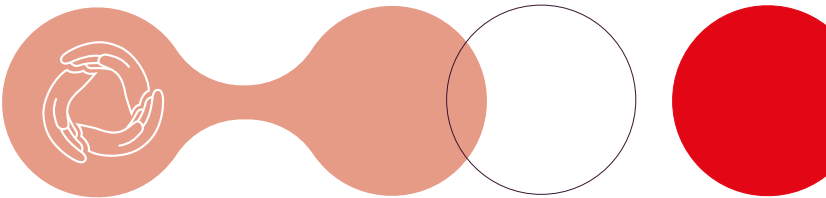
# Keep moving with Kalmar Services

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

## Kalmar Care

**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.



### Service models:



#### 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

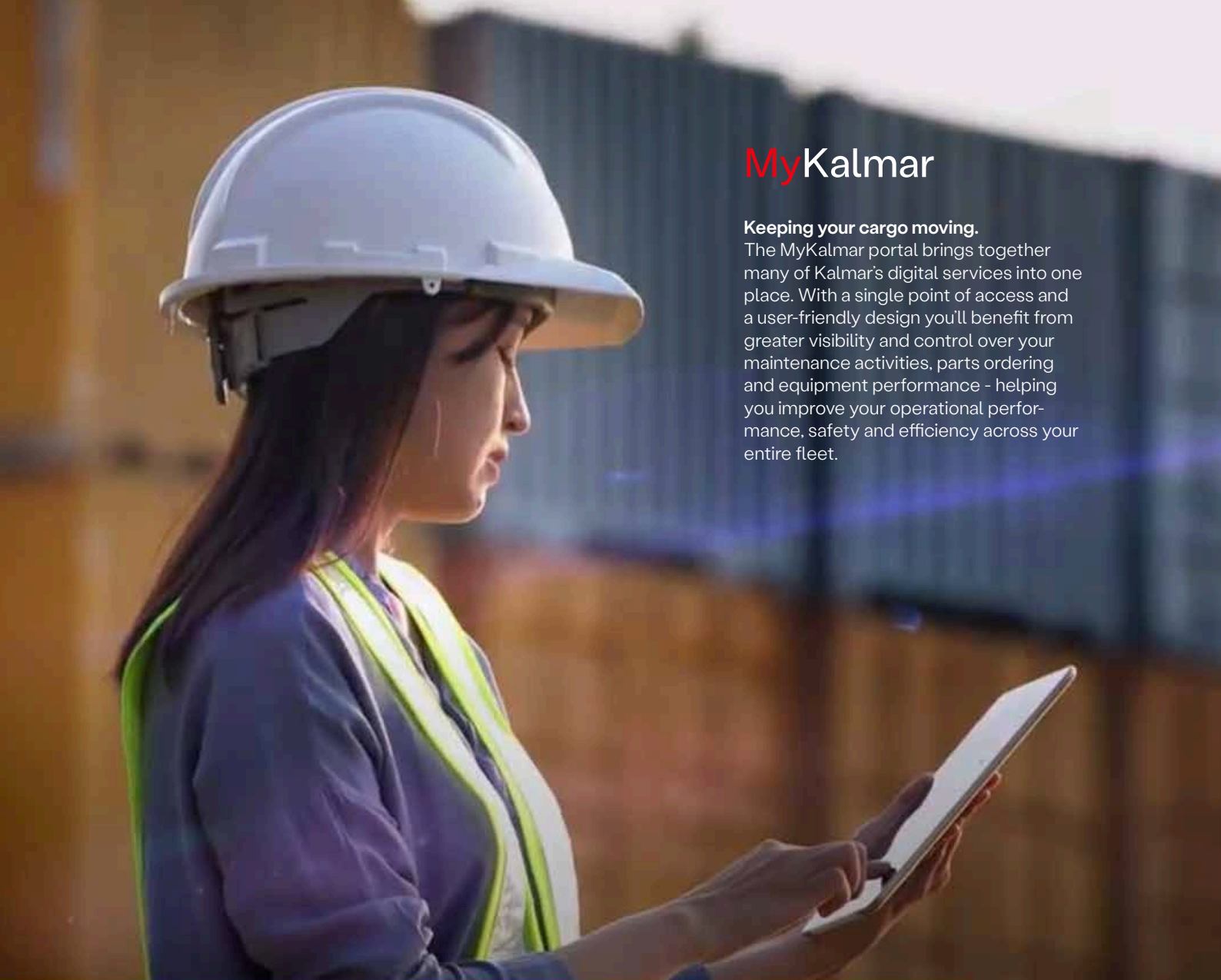
Top-of-the-line service whenever you need it.

Maintenance Planning	●	●
Preventive Maintenance	●	●
Predictive Maintenance		●
Corrective Maintenance		●
Preventive Spare Parts	●	●
Corrective Spare Parts		●
Lubricants	●	●
MyKalmar	●	●
Kalmar Insight	●	●
Tyre Maintenance		●
Battery Maintenance		●

● Included    ● Optional

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





## MyKalmar

**Keeping your cargo moving.**  
The MyKalmar portal brings together many of Kalmar's digital services into one place. With a single point of access and a user-friendly design you'll benefit from greater visibility and control over your maintenance activities, parts ordering and equipment performance - helping you improve your operational performance, safety and efficiency across your entire fleet.

## 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 apply.



## 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 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 according to:**

- Machinery Directive 2006/42/EC
- Safety Industrial Trucks Standard ISO 3691-1 + EN 16307-1
- Safety Low & High Lift Trucks Standard ANSI / ITSDF B56.1
- Stability Masted Forklift Trucks Standard ISO 22915-1, -2
- Electrics / Electronics Standard EN 1175
- Electromagnetic Compatibility Directive 2014/30/EC
- Electromagnetic Compatibility Standard EN 12895
- Noise Emission Directive 2000/14/EC and 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)

**Chassis**

- Strong, durable and welded C-beam heavy-duty 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
- Dual access stairways on left / right sides (steps/handles left side)
- Lifting eyes and anchor points (front & rear)
- Towing pin in rear counter weight

**Body**

- Strong and protective steel mudguards (front / rear)
- Long bottom step between the mudguards (anti-slip) on both sides
- Short access steps (2x) up to the cabin (anti-slip) on LHS
- Lamp brackets on front mudguards (2x)
- Basic noise insulation kit of the forklift

**Steer Axle (rear)**

- Kalmar steer axle mounted dual pivot bearings
- El-servo power steering with double acting cylinder
- Steer axle with narrow turning radius
- Steer links of "dog-bone type" (easy to change)
- Diesel tank (170 lit) incl. breather filter
- Kessler D81 planetary axle with differential drive
- Maintenance-free oil-cooled Wet Disc Brakes (WDB)
- Single parking brake, spring loaded & hydraulic release
- High pressure filter (10 µm) for the brakes
- Drive Axle DCG100-180 load center 1200, Width 1816mm

**Drive Axle (Front)**

- Kessler D81 dual-input drive axle with hub reductions
- Maintenance-free oil-cooled Wet Disc Brakes (WDB)
- Dual parking brake, spring loaded & hydraulic release
- High pressure filter (10µm) for the brakes

**Wheels (Tyres & Rims)**

- DCG100-120, Tyres 11.00 x 20" (Rim 8.00 x 20")
- DCG127-180, Tyres 12.00 x 20" (Rim 8.00 x 20")

**Drivetrain**

- Volvo D5, EU stage 5 (EPA Tier 4-Final)
- Cummins 6.7, EU stange 3 & 5 (EPA Tier 3 & 4-Final)
- 4-cylinder diesel engines with pre-heater
- High power & torque with low fuel consumption
- Engine monitoring and protection systems
- Automatic transmissions ZF 3WG-161 or 3WG-171
- 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 (220 lit) incl. breather filter

**Load-Sensing Hydraulics**

- Pressure filter for hydraulics / brakes (2x/10 µm)
- Load-sensing variable piston pumps (2x)
- Power-on-demand with high lift & lowering speeds

- Pumps for mast, carriage, brakes & steering
- Fixed pump for brake pressure & oil cooling
- Servo filter for the work hydraulics (10 µm)
- Pressure filter for hydraulics / brakes (10 µm)
- Power steering, power brakes & ORFS-couplings
- Hydraulic oil cooler unit (on RHS)
- Hydraulic tank (220 lit), cooling, breather filter & ORFS-couplings

**Lift Mast**

- 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 rollers
- Large shafts-bearing for mast, strong tilt fixation
- Mast tilt angles +5 / -10 deg (FW / BW)

**Fork Carriage**

- Carriage with strong wheels, bearings & guide rollers
- Widths: 2450 mm (100-140) / 2500 mm (150-180)

**Forks**

- Fork mountings of roller-type
- Cross sections: (100-140), 200 x 65 mm / (150-180), 250 x 100 mm
- Tapering: Standard 0-200 mm full thickness (fork length is 1600 mm or shorter)
- Tapering: Standard 0-600 mm full thickness (fork length above 1600 - 2400 mm)
- Tapering: Standard 0-1200 mm full thickness (fork length above 2400 mm)

**Electrical System 24V**

- Electric cabinet on chassis, battery box, batteries 24V & main power switch
- Electric cabinet, mounted inside cabin
- 2 LED head lights on front fenders (one beam)
- 2 LED working lights on mast
- 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 flashing LED-brake lights (when reversing)
- 1 rotating warning LED-beacon

**Cabin EGO**

**Structure.**

- Spacious, modern cabin with great ergonomY level
- Strong profiles, pillars and cross members
- FOPS certified drivers cabin (Falling object protection safety)
- DCG100-180, Tilttable cabin with full 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

**Comfort**

- 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 etc
- 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 & forks
- Auto rev-up accelerator at lifting / tilting / fork position
- 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

**Climate**

- ECHV, electronic controlled heating & ventilation
- Powerful cab heater, power 10 kW (34100 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 main systems

**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 AdBlue)
- Est. operating time before empty tank (hour/min)
- 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

**Colour**

- Cabin: Iron-Grey RAL 7011
- Chassis, tanks & mudguards: Red RAL 3000
- Mast, carriage and forks: Black RAL 7021
- Rims: Iron-Grey RAL 7011

**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
- Fuse diagram
- Instruction manual
- Maintenance manual
- Spare parts catalogue

**Warranty**

- Kalmar standard warranty: 12 months / 2.000 hours

# Options\*

**Chassis**

- 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
- Radials: Continental RT20 and Michelin XZM
- Other brands up on request

**Drivetrain**

- ZF 3WG-161 (3+3 gears)
- Cummins QSB-6.7-C173 (EU3 / Tier 3, 129 kW, 800 Nm, 6.70 l, 6-cyl)
- Cummins B-6.7-C173 (EU5 / Tier 4-Final, 129 kW, 1120 Nm, 6.70 l, 6-cyl)
- ZF 3WG-171 (3+3 gears)
- Cummins B6.7-C225 (EU5 / Tier 4-Final, 168-188 kW, 1186 Nm, 6.70 l, 6-cyl)
- Volvo TAD-582-VE (EU5 / Tier 4-Final, 160 kW, 1120 Nm, 5.10 l, 4-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)

**Hydraulics**

- 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
- Hydraulic oil heater 1 kW (single or double)
- Hydraulic oil cooler unit (on RHS) for brakes
- Mast tilt angles: FW +11 / BW -8 deg (19 deg)
- Mast tilt angles: FW +14 / BW -11 deg (25 deg)

**Lifting Mast**

- Duplex Standard (no FL); lift heights DCG100-140 3.00 - 10.00 m, DCG100-180 3 - 10.00 m
- Duplex Freelift (full FL); lift heights 3.00 - 7.00 m
- Triplex Freelift (full FL); lift heights 4.50 - 7.00 m
- Duplex Heavy-duty; lift heights 4 - 6.00 m
- Other lift heights / closed heights upon request

**Fork Carriage**

- DCG100-140: Sideshift/fork positioning: width 2.45 / 2.90 m
- DCG150-180: Sideshift/fork positioning: width 2.50 / 2.95 / 3.45 m
- DCG100-140: Low model of SS/FP-carriage
- DCG150-180: Sideshift/fork position + center levelling: width 2.50 - 3.45 m
- Attachments: carriage sides, chain brackets & hoses
- Attachment of various brands for factory integration
- Other carriage width upon request
- Fixed carriage: manual moving forks (width 2.50 m)
- Sideshift carriage: manual moving forks (width 2.50 m)
- Sideshift/fork position: pin-type (width 2.50 m)

**Forks**

- Large selection of fork dimensions, tapering and designs
- See fork dimensions under Specifications
- Length: 1200 up to 2400 mm in steps
- Width: 200 - 250 mm / 300 - 400 mm
- Thickness: 65, 70, 80, 90 - 100 mm
- Other cross sections and length upon request
- Tapering: standard 0-600 mm full thickness / 600-tip with taper
- Tapering: various optional tapering / short or full taper
- 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**

- Spreader - (Fork mounting)
- Inverted forks
- Coilram
- Rotator
- Load stabiliser
- 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)
- Buzzer when reversing (reverse alarm)
- 2 position LED-lights on each side of the truck

**Lamps**

- 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)
- Blue safety light, rearward or forward
- 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

**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 techn.)
- Speed restriction set by customer in display: default 15 km/hv
- Tyre pressure monitoring system (TPMS / Bluetooth)
- Alcolock Draeger in cabin
- Big rear view mirrors on front mudguards (2x) + 2x in the mast

**Cabin EGO**

**Structure**

- Globetrotter cabin +200 mm higher, roof 12 mm (repl 6 mm)
- Elevated cabin 300 mm
- Rotatable Driver Seat, electric 180 deg (to the left)
- Turnable Driver Seat, manual 55 deg (to the right)
- 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 laminated
- Roof window 12 mm (repl standard 6 mm)
- Electric cabin tilt pump (up/down)
- Electric heated mirrors, front fender/standard pos
- External cabin reverse mirrors (2x)
- External cabin reverse mirrors (2x) with heating
- Electric heated + adjustable mirrors, front mudguards

**Comfort**

- Air cushioned driver seat with horizontal suspension
- 3-point seat belt
- Extended seat backrest
- Headrest for driver's seat
- Armrest adjustable left side
- Seat heating
- Seat cover in vinyl
- 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)

**Indicator lamps:**

- Head beam
- Direction indication (blinkers)
- Parking brake

**Climate**

- ECC, electronic heating, cooling (AC) & ventilation
- Strong cooling unit, power 14.0 kW (47.700 Btu)
- Tinted windows including laminated front window
- Sun visors front, roof and rear windows

**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)
- 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)

**Camera safety**

- Modular full HD solutions (1920x1080p)
- Extra front mast camera - to cab monitor
- Extra front carriage camera - to cab monitor
- Radar warning sensors rear (2x) to cab monitor
- Monitor 7in Quad, max 4 connections (repl Dual)
- Monitor 10in Quad, max 4 connections (repl Dual)
- DVR recorder, up to 4 channels, with SD-card (128 GB)
- 360 birdview camera solution

**Information Systems**

- VDI - Vehicle Data Interface

**Fleet Management (Kalmar Insight)**

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

**Colour**

- Other RAL colour than standard, chassis
- Special and multiple colours, chassis
- Other colour than standard, striping foil
- Reinforced anti-corrosion protection

**Documentation & Decals**

- Extra set of documentation
- Workshop manuals
- Load chart lbs/inch in cab & sign "no riders"
- Documentation on memory stick

**Training**

- Training packages (driver, service, maintenance, software)
- Contact Kalmar Training Centre for more information

**Warranty**

- 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 subject to change.



# Specifications

MODELS LIFTING CAPACITY	Models				DCG100-6	DCG120-6	DCG127-6	DCG140-6
		Rated capacity		kg	10000	12000	12700	14000
		Load centre distance	L4	mm	600	600	600	600
FORKLIFT DIMENSIONS		Truck length (to fork face front)	L	mm	4720	4725	4725	4985
		Distance, centre drive axle - fork face front	L2	mm	895	900	900	910
		Wheelbase	L3	mm	3000	3000	3000	3250
		Truck width (over tyres)	B	mm	2510	2510	2540	2540
		Roof height cabin (basic forklift)	H6	mm	2895	2895	2920	2920
		Seat height EGO	H8	mm	1745	1745	1770	1770
		Height / width, max (with tilted cabin)	T1 / T2	mm	3370 / 3350	3370 / 3350	3395 / 3380	3395 / 3380
		Track (c-c), front / rear	S1 / S2	mm	1840 / 1960	1840 / 1960	1855 / 1960	1855 / 1960
		Turning radius, outer / inner	R1 / R2	mm	4180 / 75	4180 / 75	4180 / 75	4360 / 125
		Aisle width min, at 90° driving with forks	A1	mm	6470	6475	6475	6665
		Aisle width min, at 90° stacking 20ft / 40ft			-			
		Ground clearance, min		mm	330		350	
LIFTING EQUIPMENT	Duplex Standard	Lifting height <sup>1</sup>	H4	mm	5000			
		Lifting height to twistlocks, min*			-			
		Mast height, min	H3	mm	4015			
		Mast height, max	H5	mm	6515		6535	
		Mast tilt, forward – backward	a – β	°	5 / 10			
	Forks	Width x Thickness	b x a	mm	200 x 65	200 x 70	200 x 70	200 x 80
		Length	l	mm	1200			
		Forks position, outside width, min-max.	V	mm	570 / 2330			
		Forks sideshift, max stroke at opening (c-c) <sup>2</sup>	V1 – V	mm	± 440 / 1450			
		Fork carriage width <sup>4</sup>	b3		2450			
		Spreader width, min			-			
WEIGHTS		Service weight <sup>3</sup>		kg	16 200	16 700	17 200	17 500
	Axle load front	Unloaded		kg	8 700	8 800	8 800	9 000
		At rated load		kg	23 700	26 700	27 850	29 500
	Axle load rear	Unloaded		kg	7 500	7 900	8 400	8 500
		At rated load		kg	2 500	1900	2 050	2 000
WHEELS	Wheels	Number of wheels, front – rear (x = driven)			4 – 2			
	Tyres	Pneumatics, type / pressure (front - rear)			Diagonal / 0.9			
		Dimensions, front – rear		tum	11.00x20"/PR16			
	Rims	Dimensions, front – rear		tum	8.00x20"			
AXLES	Steer axle	Manufacturer, type - designation			Kalmar steer axle / Power steering / double acting single cylinder			
	Drive axle	Manufacturer, type - designation			Kessler D81-PL478-NLB / drive axle with differential and hub reduction			
	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	Hydraulics	System type / pump type			Load-sensing / power -on-demand / piston pumps			
	Oil	Max working pressure		MPa	17.0	17.5	18.0	19.0
	Tank	Oil volume		Lit	220			
		Fuel tank, capacity		Lit	170			
		AdBlue tank, capacity		Lit	25			

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.  
5. DCG170-12 in optional capacity - rated 17000 kgs @ 1200 mm LC.  
Mast and carriage with 250 mm extended wheel distance and radial 12.00R20.

DCG150-6	DCG100-12	DCG120-12	DCG150-12	DCG160-6	DCG160-9	DCG160-12 <sup>5</sup>	DCG170-12	DCG180-6	DCG70-35E3	DCG70-35E4
15000	10000	12000	15000	16000	16000	16000	17000	18000	7000	7000
600	1200	1200	1200	600	900	1200	1200	600	1220	1220
5055	5065	5315	5325	5305	5315	5575	5575	5065	5595	5845
980	990	990	1000	980	990	1000	1000	990	1265	1265
3250	3250	3500	3500	3500	3500	3750	3750	3250	3500	3500
2540	2540	2540	2540	2540	2540	2540	2540	2540	2540	2900*
2920	2920	2920	2920	2920	2920	2920	2920	2920	2920	2920
1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770
3395 / 3380	3395 / 3380	3395 / 3380	3395 / 3380	3395 / 3380	3395 / 3380	3395 / 3380	3395 / 3380	3395 / 3380	3395 / 3380	3395 / 3380
1855 / 1960	1855 / 1960	1855 / 1960	1855 / 1960	1855 / 1960	1855 / 1960	1855 / 1960	1855 / 1960	1855 / 1960	1855 / 1960	2210 / 1960
4360 / 125	4360 / 125	4785 / 420	4785 / 420	4785 / 420	4785 / 420	5175 / 600	5175 / 600	4570 / 270	4785 / 420	4785 / 420
6735	7945	8370	8380	7160	8160	8770	8770	6745	-	-
-				-				9300 / 14000		
350				350				350		
5000				5000				9225		12225
-				-				2225		
4195				4195				5575		7075
6535				6535	6535	6535	6785	6535	9075	12075
5 / 10				5 / 10				3 / 5		
200 x 80	220 x 90	220 x 90	250 x 00	200 x 80	220 x 90	250 x 100	250 x 100	220 x 90	-	-
1200	2400	2400	2400	1200	1800	2400	2400	1200	-	-
600 / 2360	600 / 2360	600 / 2360	700 / 2360	600 / 2360	640 / 2360	700 / 2360	700 / 2360	640 / 2360	-	-
± 440 / 1480	± 430 / 1500	± 430 / 1500	± 415 / 1530	± 440 / 1480	± 430 / 1500	± 415 / 1530	± 415 / 1530	± 430 / 1500	± 140	
2500				2500				2450		
-				-				6064		6064
19 800	19 100	20 300	22 900	19 600	21 600	23 100	24 100	21700	25300	27400
10 300	10 500	10 700	10 900	10 400	10 600	11 200	11 100	10400	15900	17500
32 600	27 200	30 200	35 300	33 600	35 200	36 600	38 100	37200	28000	29600
9 500	8 600	9 600	12 000	9 200	11 000	11 900	13 000	11300	9400	9900
2 200	1 900	2 100	2 600	2 000	2 400	2 500	3 000	2500	4300	4800
4 – 2				4 – 2				4 – 2		
Diagonal / 0.9				Diagonal / 0.9		Diagonal / 1.0		Radial / 1.0	Diagonal / 0.9	
12.00×20"/PR20				12.00×20"/PR20				12.00R20	12.00×20"/PR20	
8.00x20"				8.00x20"				8.50x20"	8.00x20"	
Kalmar steer axle / Power steering / double acting single cylinder										
Kessler D81-PL478-NLB / drive axle with differential and hub reduction										
Oil cooled wet disc brakes (WDB) / drive wheels										
Single dry disc / spring activated - hydraulic release / drive wheels										
Load-sensing / power -on-demand / piston pumps										
16.5	12.5	15.0	17.0	17.0	17.5	18.0	18.5	19.0	20.0	20.0
220				220				220		
170				170				170		
25				25				25		

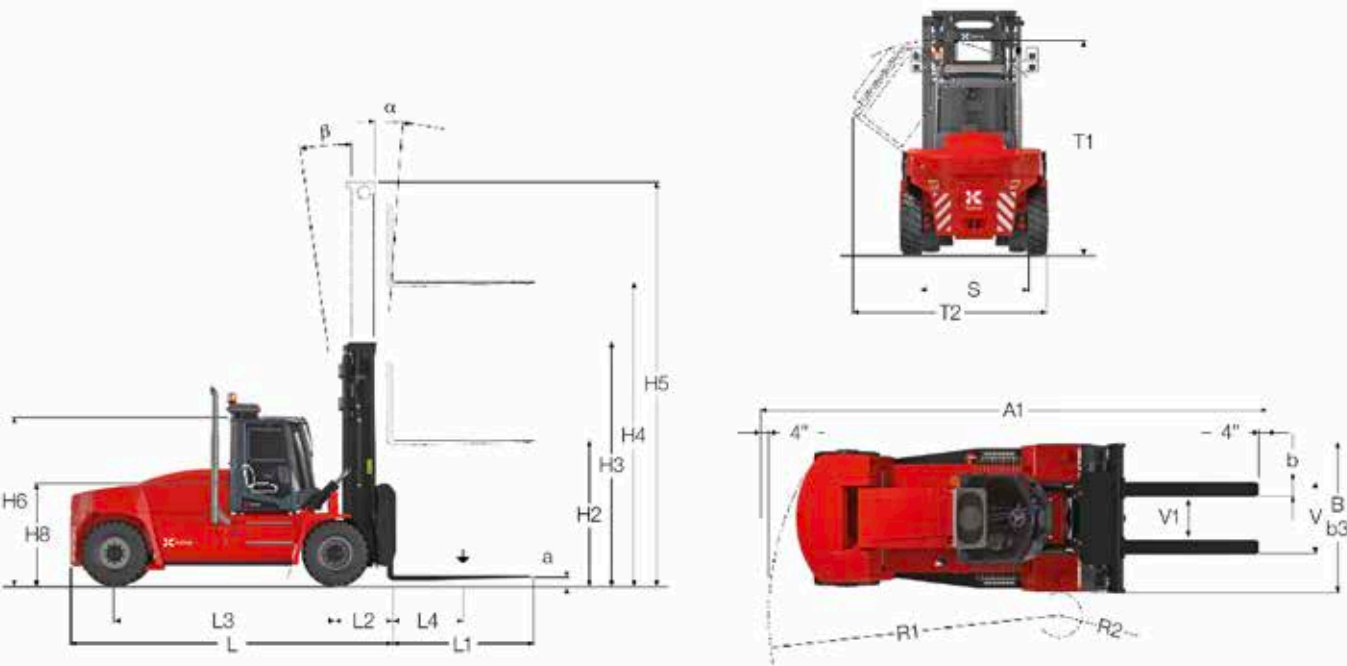


Drivetrain

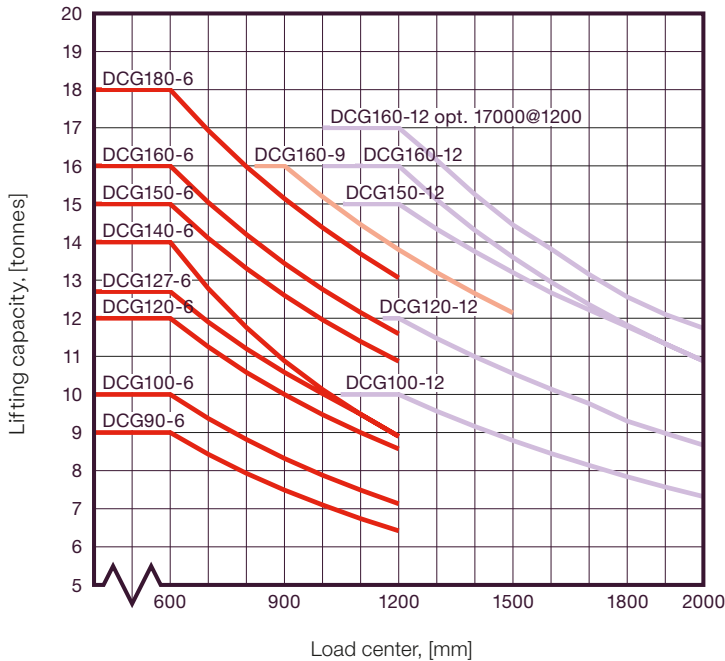
MODELS	Models		DCG100-180	DCG100-180	DCG100-180	DCG100-180
	Wheelbase	mm	3000 - 3750	3000 - 3750	3000 - 3750	3000 - 3750
ENGINE	Drive motor, manufacturer - type designation <sup>1</sup>		Cummins QSB6.7-C173	Cummins B6.7-C173	Cummins B6.7-C225	Volvo TAD-582-VE
	Fuel types, motor type		Diesel / HVO / 4-stroke			
	Turbo charger / cooling		Turbo (FGT) + Intercooler	Turbo (VGT) + Intercooler	Turbo (VGT) + Intercooler	Turbo (FGT) + Intercooler
	Engine after treatment type <sup>2</sup>		No AdBlue, DOC, SCR or DPF	No AdBlue, DOC, and ASC	With AdBlue, DOC and ASC	With AdBlue, DOC and ASC
	Diesel particle filter (DPF)		No DPF	With DPF	With DPF	With DPF
	Emission standards		EU Stage IIIA / EPA Tier 3	EU Stage V / EPA Tier 4-Final	EU Stage V / EPA Tier 4-Final	EU Stage V / EPA Tier 4-Final
	Rated power / at revs (ISO 3046)	kW / rpm	129 / 2200	129 / 2200	168 / 2200	160 / 2200
	Peak power / at revs (ISO 3046)	kW / rpm	133 / 2000	129 / 1100 - 2200	188 / 1800 - 1900	160 / 1700 - 2200
	Peak torque / at revs (ISO 3046)	NW / rpm	800 / 1400	1120 / 1100	1186 / 1300	900 / 1300
	Number of cylinders / displacement	lit (in2)	6 / 6.702 (408)	6 / 6.702 (408)	6 / 6.702 (408)	4 / 5.130 (313)
	Fuel consumption, normal driving <sup>3</sup>	lit/h	6 - 10	6 - 10	6 - 10	6 - 9
AdBlue consumption, normal driving	%	-	4 - 6	4 - 6	4 - 6	
GEAROX & MISC	Manufacturer's type designation		ZF 3WG-161	ZF 3WG-161	ZF 3WG-171	ZF 3WG-171
	Clutch, type		Torque converter		Torque converter	
	Gearbox, type		Hydrodynamic Powershift		Hydrodynamic Powershift	
	Eco Drive Mode (EDM) drivetrain settings <sup>3</sup>		3 modes / Eco, Normal & Power		3 modes / Eco, Normal & Power	
	Numbers of gears, forward / reverse	gears	3 / 3	3 / 3	3 / 3	3 / 3
	Alternator, type / power	W	AC / 1680 (28V x 60A)	AC / 1960 (28V x 70A)	AC / 1960 (28V x 70A)	AC / 3080 (28V x 110A)
	Starting battery, voltage / capacity	V / Ah	2x12 / 145	2x12 / 145	2x12 / 145	2x12 / 145

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.



Load diagram\*



\* DCG100-6 to DCG180-6 models:  
Full lifting capacity up to 5,000mm  
lift height with duplex/duplex  
freelift/triplex masts and integrated  
sideshift/fork positioning carriage.



# Performance

MODEL	All wheelbases (standard and short)		DCG100-6	DCG120-6	DCG127-6	DCG140-6
	Cummins engine		QSB6.7-C220 (EU Stage IIIA / EPA Tier 3)			
SPEEDS	Travel speed, forward - reverse	Unloaded	km/h	29 - 29	29 - 29	30 - 30
		At rated load	km/h	28 - 28	28 - 28	28 - 28
	Lifting speed	Unloaded	m/s	0.60	0.50	0.50
		At rated load 70%	m/s	0.55	0.45	0.45
	Lowering speed	Unloaded	m/s	0.35	0.30	0.30
POWER		At rated load	m/s	0.40	0.40	0.40
	Gradeability, max	Unloaded	%	94	89	78
		Rated load	%	46	41	37
	Gradeability, at 2 km/h	Unloaded	%	68	65	59
		Rated load	%	37	33	30
SOUND	Drawbar pull		kN	109	109	104
	Noise level, inside (with EDM¹)	EN12053, LpAZ	dB(A)	70 - 72		
	Noise level, outside (with EDM¹)	EN12053, LWAZ	dB(A)	103 - 105		
	Noise level, outside (with EDM¹)	2000/14/EC, LWAZ	dB(A)	106 - 109		

DCG150-6	DCG100-12	DCG120-12	DCG150-12	DCG160-6	DCG160-9	DCG160-12	DCG170-12	DCG180-6	DCG70-35E3	DCG70-35E4
QSB6.7-C260 (EU Stage IIIA / EPA Tier 3)										
30 - 30	30 - 30	30 - 30	30 - 30	30 - 30	30 - 30	30 - 30	30 - 30	30 - 30	29 - 29	29 - 29
27 - 27	28 - 28	28 - 28	27 - 27	27 - 27	27 - 27	27 - 27	27 - 27	27 - 27	28 - 28	28 - 28
0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.60	0.60
0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.55	0.55
0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.35	0.35
0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
63	66	61	52	64	56	51	51	55	46	41
31	39	34	29	31	29	28	28	27	34	32
49	51	47	41	50	44	41	41	44	36	33
26	31	28	23	25	23	23	23	22	28	26
104	104	104	104	104	104	104	104	104	104	104
70 - 72				70 - 72				70 - 72		
103 - 105				103 - 105				103 - 105		
106 - 109				106 - 109				106 - 109		

MODEL	All wheelbases (standard and short)		DCG100-6	DCG120-6	DCG127-6	DCG140-6
	Cummins engine		B6.7-C173 (EU stage V / EPA Tier 4-Final)			
SPEEDS	Travel speed, forward - reverse	Unloaded	km/h	29 - 29	29 - 29	30 - 30
		At rated load	km/h	28 - 28	28 - 28	28 - 28
	Lifting speed	Unloaded	m/s	0.60	0.50	0.50
		At rated load 70%	m/s	0.55	0.45	0.45
	Lowering speed	Unloaded	m/s	0.35	0.30	0.30
POWER		At rated load	m/s	0.40	0.40	0.40
	Gradeability, max	Unloaded	%	88	83	74
		Rated load	%	44	40	36
	Gradeability, at 2 km/h	Unloaded	%	73	70	63
		Rated load	%	39	35	32
SOUND	Drawbar pull		kN	105	105	101
	Noise level, inside (with EDM¹)	EN12053, LpAZ	dB(A)	70 - 72		
	Noise level, outside (with EDM¹)	EN12053, LWAZ	dB(A)	103 - 105		
	Noise level, outside (with EDM¹)	2000/14/EC, LWAZ	dB(A)	106 - 109		

DCG150-6	DCG100-12	DCG120-12	DCG150-12	DCG160-6	DCG160-9	DCG160-12	DCG170-12	DCG180-6	DCG70-35E3	DCG70-35E4
B6.7-C173 (EU stage V / EPA Tier 4-Final)										
30 - 30	30 - 30	30 - 30	30 - 30	30 - 30	30 - 30	30 - 30	30 - 30	30 - 30	29 - 29	29 - 29
27 - 27	28 - 28	28 - 28	27 - 27	27 - 27	27 - 27	27 - 27	27 - 27	27 - 27	28 - 28	28 - 28
0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.60	0.60
0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.55	0.55
0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.35	0.35
0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
60	63	58	50	61	54	49	49	53	46	41
30	37	33	28	30	28	27	27	26	34	32
52	54	50	43	52	46	43	43	46	36	33
27	33	29	24	26	25	24	24	23	28	26
101	101	101	101	101	101	101	101	101	104	104
70 - 72			70 - 72			70 - 72			70 - 72	
103 - 105				103 - 105				103 - 105		
106 - 109						106 - 109			106 - 109	

Notes:  
1. With Eco Drive Mode (EDM) drive train settings included:



# Performance

MODEL	All wheelbases (standard and short)		DCG100-6	DCG120-6	DCG127-6	DCG140-6
	Cummins engine		B6.7-C225 (EU stage V / EPA Tier 4-Final)			
SPEEDS	Travel speed, forward - reverse	Unloaded	km/h	29 - 29	29 - 29	30 - 30
		At rated load	km/h	28 - 28	28 - 28	28 - 28
	Lifting speed	Unloaded	m/s	0.60	0.50	0.50
		At rated load 70%	m/s	0.55	0.45	0.45
	Lowering speed	Unloaded	m/s	0.35	0.30	0.30
POWER		At rated load	m/s	0.40	0.40	0.40
	Gradeability, max	Unloaded	%	206	178	139
		Rated load	%	66	58	52
	Gradeability, at 2 km/h	Unloaded	%	104	98	85
		Rated load	%	50	44	40
SOUND	Drawbar pull		kN	143	143	137
	Noise level, inside (with EDM¹)	EN12053, LpAZ	dB(A)	70 - 72		
	Noise level, outside (with EDM¹)	EN12053, LWAZ	dB(A)	103 - 105		
	Noise level, outside (with EDM¹)	2000/14/EC, LWAZ	dB(A)	106 - 109		

DCG150-6	DCG100-12	DCG120-12	DCG150-12	DCG160-6	DCG160-9	DCG160-12	DCG170-12	DCG180-6	DCG70-35E3	DCG70-35E4
B6.7-C225 (EU stage V / EPA Tier 4-Final)										
30 - 30	30 - 30	30 - 30	30 - 30	30 - 30	30 - 30	30 - 30	30 - 30	30 - 30	29 - 29	29 - 29
27 - 27	28 - 28	28 - 28	27 - 27	27 - 27	27 - 27	27 - 27	27 - 27	27 - 27	28 - 28	28 - 28
0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.60	0.60
0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.55	0.55
0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.35	0.35
0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
99	107	94	76	101	84	75	75	84	66	59
43	54	47	39	42	40	38	38	37	47	44
68	72	66	56	69	60	55	55	60	49	44
34	41	37	30	33	31	29	29	29	37	34
137	137	137	137	137	137	137	137	137	137	137
			70 - 72				70 - 72			
103 - 105				103 - 105					103 - 105	
106 - 109						106 - 109			106 - 109	

MODEL	All wheelbases (standard and short)		DCG100-6	DCG120-6	DCG127-6	DCG140-6
	Volvo engine		TAD-582-VE (EU stage V / EPA Tier 4-Final)			
SPEEDS	Travel speed, forward - reverse	Unloaded	km/h	29 - 29	29 - 29	30 - 30
		At rated load	km/h	28 - 28	28 - 28	28 - 28
	Lifting speed	Unloaded	m/s	0.60	0.50	0.50
		At rated load 70%	m/s	0.55	0.45	0.45
	Lowering speed	Unloaded	m/s	0.35	0.30	0.30
POWER		At rated load	m/s	0.40	0.40	0.40
	Gradeability, max	Unloaded	%	130	120	99
		Rated load	%	56	50	44
	Gradeability, at 2 km/h	Unloaded	%	86	82	71
		Rated load	%	44	39	35
SOUND	Drawbar pull		kN	126	126	119
	Noise level, inside (with EDM¹)	EN12053, LpAZ	dB(A)	70 - 72		
	Noise level, outside (with EDM¹)	EN12053, LWAZ	dB(A)	103 - 105		
	Noise level, outside (with EDM¹)	2000/14/EC, LWAZ	dB(A)	106 - 109		

DCG150-6	DCG100-12	DCG120-12	DCG150-12	DCG160-6	DCG160-9	DCG160-12	DCG170-12	DCG180-6	DCG70-35E3	DCG70-35E4
TAD-582-VE (EU stage V / EPA Tier 4-Final)										
30 - 30	30 - 30	30 - 30	30 - 30	30 - 30	30 - 30	30 - 30	30 - 30	30 - 30	29 - 29	29 - 29
27 - 27	28 - 28	28 - 28	27 - 27	27 - 27	27 - 27	27 - 27	27 - 27	27 - 27	28 - 28	28 - 28
0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.60	0.60
0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.55	0.55
0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.35	0.35
0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
77	82	74	62	78	67	61	61	67	54	49
37	45	40	33	36	34	32	32	32	40	37
58	61	56	48	59	52	47	47	51	42	39
29	36	32	27	29	27	26	26	25	32	30
119	119	119	119	119	119	119	119	119	119	119
			70 - 72				70 - 72			
103 - 105				103 - 105					103 - 105	
106 - 109						106 - 109			106 - 109	

Notes:  
1. With Eco Drive Mode (EDM) drive train settings included:



# Lifting equipment

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

DUPLEX STANDARD (2-stage)	DCG100-140				DCG100-180			
	Lift Height	Mast Height		Free Lift	Lift Height	Mast Height		Free Lift
	H4	H3 min	H5 max	H2	H4	H3 min	H5 max	H2
	3000	3015	4515	–	3000	3195	4695	–
	3250	3140	4765	–	3250	3320	4945	–
	3500	3265	5015	–	3500	3445	5195	–
	3750	3390	5265	–	3750	3570	5445	–
	4000	3515	5515	–	4000	3695	5695	–
	4500	3765	6015	–	4500	3945	6195	–
	5000	4015	6515	–	5000	4195	6695	–
	5500	4265	7015	–	5500	4445	7195	–
	6000	4515	7515	–	6000	4695	7695	–
	6500	4765	8015	–	6500	4945	8195	–
	7000	5015	8515	–	7000	5195	8695	–
	–	–	–	–	7500	5825	9575	–
DUPLEX FREELIFT (2-stage)	DCG100-140				DCG100-180			
	Lift Height	Mast Height		Free Lift	Lift Height	Mast Height		Free Lift
	H4	H3 min	H5 max	H2	H4	H3 min	H5 max	H2
	3000	3015	4515	1500	3000	3195	4695	1500
	3250	3140	4765	1625	3250	3320	4945	1625
	3500	3265	5015	1750	3500	3445	5195	1750
	3750	3390	5265	1875	3750	3570	5445	1875
TRIPLEX FREELIFT (3-stage)	DCG100-140				DCG100-180			
	Lift Height	Mast Height		Free Lift	Lift Height	Mast Height		Free Lift
	4500	2970	5970	1500	4500	3130	6190	1500
	5000	3137	6470	1667	5000	3297	6690	1667
	5500	3303	6970	1833	5500	3463	7190	1833
DUPLEX HEAVY DUTY (2-stage)	DCG100-140				DCG100-180			
	Lift Height	Mast Height		Free Lift	Lift Height	Mast Height		Free Lift
	H4	H3 min	H5 max	H2	H4	H3 min	H5 max	H2
	4000	4065	5885	–	4000	4065	5885	–
	4500	4315	6385	–	4500	4315	6385	–
	5000	4565	6885	–	5000	4565	6885	–
	5500	4815	7385	–	5500	4815	7385	–
	6000	5065	7885	–	6000	5065	7885	–

Notes:\*

1. Duplex Heavy-Duty: mast range with additional reinforcements.  
The lifting cylinders are mounted behind the mast profiles on Duplex Standard, Duplex Freelift & Triplex freelift.  
The lifting cylinders are mounted outside the mast profiles on Duplex Heavy-Duty.  
The freelift cylinders are mounted inside the mast profiles on Duplex Freelift and Triplex freelift.

## Masts



Duplex Standard  
Lift height  
3000 - 7000 mm



Duplex Freelift  
Lift height  
3000 - 7000 mm

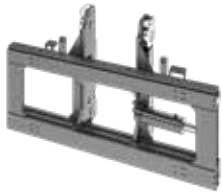


Triplex Freelift  
Lift height  
4500 - 7000 mm

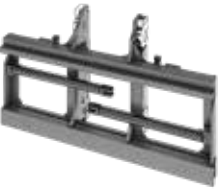


Duplex Heavy Duty  
Lift height  
4000 - 6000 mm

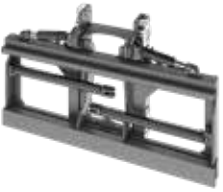
## Carriages



Carriage with Sideshift




Carriage with Sideshift /  
Fork Positioning




Carriage with Sideshift /  
Fork Positioning and Centre  
Levelling


## Forks




Fork Shaft System  
Roller Bearing  
(hook on type)



Forks with Integral  
Roller Bearings and  
Fork Levelling



Forks with Integral  
Roller Bearings



Forks with Integral  
Pin Type Roller Bearings





Kalmar

[www.kalmarglobal.com](http://www.kalmarglobal.com)

Published by Kalmar, Copyright © Kalmar Corporation 2024.  
All rights reserved.

