



# Kalmar Medium Forklifts. DCG100-180

10 – 18 tonne capacity



# Greater total 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 Kalmar DCG100-180

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

## Designed to deliver greater total lifetime savings

It's simple: great forklift-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 supporting more than 10,000 users of forklifts with a lifting capacity of 10-18 tonnes. The DCG100-180 offers superior uptime as well as fuel and maintenance savings. As important, it incorporates the best driving environment of any forklift – 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. Each DCG100-180 forklift helps you meet them all.



# Our most productive driving environment.

## EGO cabin enables driver productivity.

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 improved 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 high demands of the climate tested EGO cabin. 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 mini steering wheel or steering lever. Integrated switch knob. Fully adjustable and individually tested for optimal ergonomics. The steering wheel can be folded forward without limiting visibility.

The 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.** Completely new open design with smart profiles and curved front and rear windows. Provides optimised views at all angles, with exceptionally good views diagonally forwards and backwards. And a strong outdoors feeling.

**Work console.** A natural extension of the driver's arm. Easy to set, adjust, use and understand. 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 easily fulfils requirements on visibility, safety and ergonomics. Durable and robust for all kinds of weathers.



# Increasing productivity of forklift-and-driver teams.

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 DCG100-180 ensures high uptime levels.

## **Boosting uptime with smarter electronics.**

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 3.5" colour display that is placed at eye level in the cabin – so the driver can make well-informed decisions.

## **Two new diesel engines meet stricter emission regulations.**

The Kalmar DCG100-180 offers you the choice of EU Stage V and Tier 4 Final emissions compliant diesel engines for regulated markets\*. From Volvo and Cummins, both cut particulate emissions by 90% as well as reduce nitrogen oxide emissions. 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 rpm.

## **Powerful hydraulics when you need it.**

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 hydraulic systems mean quicker response, high lifting speed and increased control. This combination helps drivers be more productive while using less fuel.

## **Keeping clean and cool to reduce risks of failure.**

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 e.g Sawmills or other dusty applications.

\* For non-regulated markets we can offer EU stage IIIA.



# Turn running costs into operational 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 forklift to help keep these costs low. A range of new features makes it easy to drive the DCG100-180 forklift economically and safely – securing savings throughout every shift.

## Reducing fuel consumption.

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

## ECO drive axle – 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 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 make the machine quieter to operate without losing any performance.

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

### Normal.

Balances power and economy to optimise profitability.

### Economy.

If total cost of operations outweighs the need for performance, Economy mode reduces fuel consumption by up to 15 percent.

\* Compared to Kalmar DCE90-180 with Stage IIIB engine.

# 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 forklift'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.

## **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 per cent 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.

## **ECO drive axle.**

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.

## **Turnable driver seat 180°.**

The rotatable seat is a perfect option when driving involves a lot of reversing – a time saving feature, activated by pushing a button, which also protects the driver's neck and shoulders.

## **Mini-wheel steering / Lever steering.**

Ergonomic steering, precise maneuvering. Saves the driver's shoulders during long shifts.



# Improving safety and operating costs.

Like all Kalmar equipment, Kalmar DCG100-180 forklifts and EGO cabins are designed to contribute to safe driving, low accident rates as well as low operator misuse, abuse or accidents. In short, the cabin and forklift are designed to help drivers stay alert, keep in-tune with the forklift as well as the surroundings.

## Improved forklift safety features.

The DCG100-180 helps reduce the risk of accidents. It not only meets all current and emerging demands for operator health and safety. It can also be equipped with a number of safety features making the operations as safe as possible.



### Speed Limitation System.

Kalmar can configure your forklift depending on your needs. Limitations can be set both in relation to lifting height and travel speed or in combination. In order to increase the safety in your operations.



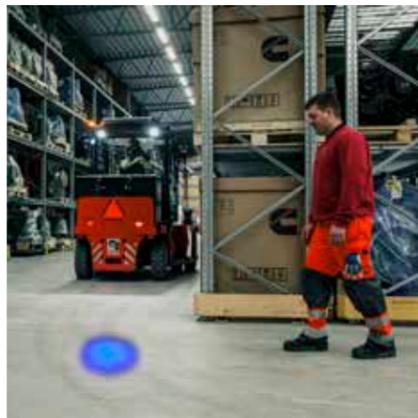
### Alcolock.

More and more companies are installing Alcolock on their machine. This is an efficient way of prohibiting persons intoxicated by alcohol to operate the forklift.



### Fire Suppression System.

In the unlikely event of a fire in the engine compartment the suppression system will automatically be activated to suppress the fire. A useful option in e.g sawmill.



Blue Safety Light System. The blue safety light alerts people that the forklift is approaching, reducing the risk of accidents.



Reducing noise and increasing driving comfort and precision improves safety. This reduces risks of costly accidents occurring.





# Improve your fleet performance and your business.

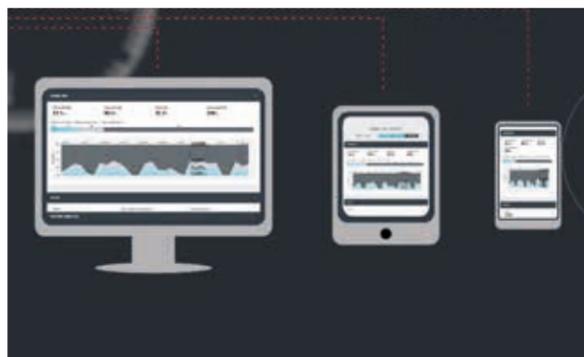


# All the support you need.

## Optimise your fleet with Kalmar Insight.

Kalmar Insight is a performance management tool for cargo and material handling, which gives you a valuable and easy to use overview of your daily operations based on equipment status and performance. Making it quicker for you to take action on relevant information that will help you improve your operations, your equipment's performance and your business.

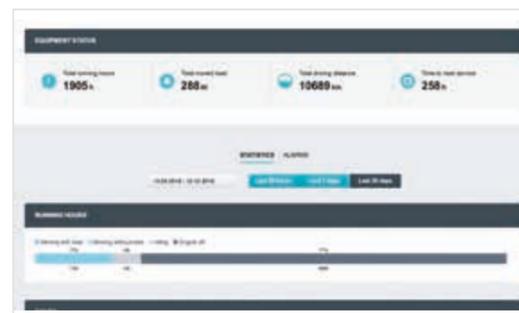
Kalmar Insight comes fitted in all new Kalmar machines and can be retrofitted to existing Kalmar machines or those built by other manufacturers.



Access on mobile, tablet or traditional screen.



View each machine's movements as they occur.



Plan your maintenance and spare parts needs.



View each operator's performance in real time.

## Kalmar Care.

### Making sure your business never stops.

We offer four different types of service and maintenance contracts. Each is designed to help you improve your operational efficiency, drive productivity and secure financial predictability. Each contract type includes a set of standardised service modules to meet your business needs. Here is an overview of the four different levels:

### The four flexible types of service contracts.

#### Kalmar Support Care

We support your maintenance processes on demand.

- Availability of competent people with the right tools and parts
- Addition of skills to existing maintenance organisation

#### Kalmar Essential Care

We perform your agreed maintenance tasks proactively.

- Availability of competent people with the right tools and parts
- Higher degree of financial predictability
- Reduced operational risk for business
- Improved availability of machines

#### Kalmar Complete Care

We meet your complete maintenance requirements.

- Improved predictive maintenance
- Low operational risk for business
- Reduced equipment downtime
- Reduced total cost of operation
- Increased operational predictability

#### Kalmar Optimal Care

We optimise your business performance.

- Guaranteed availability
- Reduced tied-in capital
- Improved business performance
- Increased peace of mind

## Kalmar Genuine Parts.

### When the right part matters.

When something needs to be replaced, you need a spare part that meets your exact needs – urgently. Kalmar offers a rapid delivery service for over 50,000 premium-quality genuine parts to anywhere in the world, with installation support if needed.

You may also want to consider outsourcing all or part of your spare parts management and inventory control. Kalmar Parts Care makes sure that critical spare parts are always on hand so your equipment downtime is kept to a minimum. Each Kalmar Parts Care plan is based on your operational needs, so talk to us today and see how we can improve your parts availability while reducing your inventory costs.

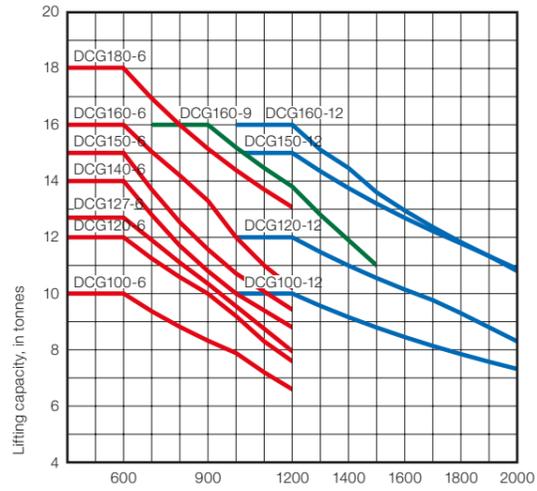
## Financing options for you.

### Lease or rent.

You may choose to buy your new forklift outright or consider leasing or renting your equipment. Kalmar offers a range of options that give you the financial predictability you need and the option to upgrade your equipment after a fixed period. With our leasing packages, you can focus on your core operations, while we perform all your service and maintenance tasks. Kalmar can also work with you when trading in your old equipment.

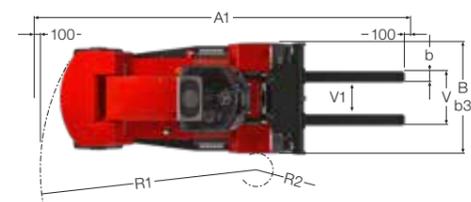
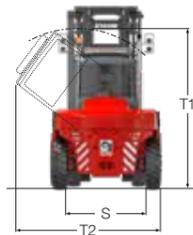
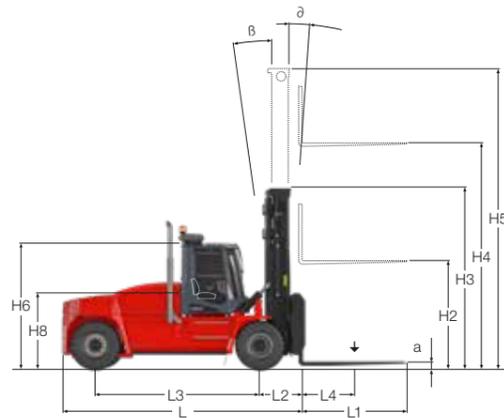
No matter what your service and support needs are, make sure you speak to your local Kalmar team first.

# Technical information.



Load centre, mm

DCG100-6 to DCG180-6 models:  
Full lifting capacity up to 5000 mm lift height with duplex/duplex  
freeliftr/triplex masts and integrated sideshift/fork positioning carriage.



		DCG 100-6	DCG 120-6	DCG 127-6	DCG 140-6	DCG 150-6	DCG 100-12	DCG 120-12	DCG 150-12	DCG 160-6	DCG 160-9	DCG 160-12	DCG 180-6	DCG 70-35 E3	DCG 70-35 E4	
<b>MAIN DATA</b>	<b>Model designation</b>	DCG 100-6	DCG 120-6	DCG 127-6	DCG 140-6	DCG 150-6	DCG 100-12	DCG 120-12	DCG 150-12	DCG 160-6	DCG 160-9	DCG 160-12	DCG 180-6	DCG 70-35 E3	DCG 70-35 E4	
	<b>Power source</b>	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	
	<b>Rated capacity / rated load</b>	10000	12000	12700	14000	15000	10000	12000	15000	16000	16000	16000	18000	7000	7000	
	<b>Load center distance</b>	600	600	600	600	600	1200	1200	1200	600	900	1200	600	1220	1220	
	<b>Load distance, center of drive axle to fork</b>	895	900	900	910	980	990	990	1000	980	990	1000	990	1265	1265	
<b>WEIGHTS</b>	<b>Wheelbase</b>	3000	3000	3000	3250	3250	3250	3500	3500	3500	3500	3750	3250	3500	3500	
	<b>Service weight</b>	16200	16700	17200	17500	19800	19100	20300	22900	19600	21600	23100	21700	25300	27400	
	<b>Axle loading, unloaded front</b>	8700	8800	8800	9000	10300	10500	10700	10900	10400	10600	11200	10400	15900	17500	
	<b>Axle loading, loaded front</b>	23700	26700	27850	29500	32600	27200	30200	35300	33600	35200	36600	37200	28000	29600	
	<b>Axle loading, unloaded rear</b>	7500	7900	8400	8500	9500	8600	9600	12000	9200	11000	11900	11300	9400	9900	
<b>Axle loading, loaded rear</b>	2500	1900	2050	2000	2200	1900	2100	2600	2000	2400	2500	2500	4300	4800		
<b>WHEELS</b>	<b>Type, front / rear</b>	Pneumatic / Pneumatic														
	<b>Tyre size, front</b>	11,00x20/16PR				12,00x20/20PR				12,00x20/20PR HD				12,00x20/20PR		
	<b>Tyre size, rear</b>	11,00x20/16PR				12,00x20/20PR				12,00x20/20PR HD				12,00x20/20PR		
	<b>Number of wheels, front / rear (x = driven wheels)</b>	4x / 2	4x / 2	4x / 2	4x / 2	4x / 2	4x / 2	4x / 2	4x / 2	4x / 2	4x / 2	4x / 2	4x / 2	4x / 2	4x / 2	
	<b>Track width, front / rear</b>	1840 / 1960	1840 / 1960	1855 / 1960	1855 / 1960	1855 / 1960	1855 / 1960	1855 / 1960	1855 / 1960	1855 / 1960	1855 / 1960	1855 / 1960	1855 / 1960	1855 / 1960	1855 / 1960	2210 / 1960
<b>Tyre pressure</b>	0,9	0,9	0,9	0,9	0,9	0,9	0,9	0,9	0,9	0,9	0,9	1	1	0,9	0,9	
<b>DIMENSIONS</b>	<b>Mast tilt, <math>\alpha</math> = forward / <math>\beta</math> = backward</b>	5 / 10	5 / 10	5 / 10	5 / 10	5 / 10	5 / 10	5 / 10	5 / 10	5 / 10	5 / 10	5 / 10	5 / 10	5 / 10	3 / 5	3 / 5
	<b>Height of mast lowered</b>	4015	4015	4035	4035	4195	4195	4195	4195	4195	4195	4195	4195	4195	5575	7075
	<b>Lift height</b>	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	7000	10000
	<b>Height of mast extended</b>	6515	6515	6535	6535	6535	6535	6535	6535	6535	6535	6535	6535	6535	9075	12075
	<b>Truck height – EGO / OHG cabin roof</b>	2895	2895	2920	2920	2920	2920	2920	2920	2920	2920	2920	2920	2920	2920	2920
	<b>Seat height</b>	1745	1745	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770
	<b>Height when tilting EGO cab / OHG</b>	3370	3370	3395	3395	3395	3395	3395	3395	3395	3395	3395	3395	3395	3395	3395
	<b>Width when tilting EGO cab / OHG</b>	3350	3350	3380	3380	3380	3380	3380	3380	3380	3380	3380	3380	3380	3380	3380
	<b>Truck length (to face of forks)</b>	4720	4725	4725	4985	5055	5065	5315	5325	5305	5315	5575	5065	5595	5845	
	<b>Truck width</b>	2480	2480	2480	2480	2540	2540	2540	2540	2540	2540	2540	2540	2540	2540	2900
	<b>Fork dimensions, width</b>	200	200	200	200	200	220	220	250	200	220	250	220	220	6064*	6064*
	<b>Fork dimensions, thickness</b>	65	70	70	80	80	90	90	100	80	90	100	90	90	2120	2120
	<b>Fork dimensions, length of fork arm</b>	1200	1200	1200	1200	1200	2400	2400	2400	1200	1800	2400	1200	-	-	
	<b>Fork carriage width</b>	2450	2450	2450	2450	2500	2500	2500	2500	2500	2500	2500	2500	2500	2450	2450
	<b>Width over fork arms, minimum/maximum</b>	2330/570	2330/570	2330/570	2330/570	2360/600	2360/640	2360/640	2360/700	2360/600	2360/640	2360/700	2360/640	-	-	
<b>Sideshift <math>\pm</math> @ width over forks</b>	440/1450	440/1450	440/1450	440/1450	440/1480	430/1500	430/1500	415/1530	440/1480	430/1500	415/1530	430/1500	140	140		
<b>Ground clearance, laden, below mast</b>	250	250	250	250	250	250	250	250	250	250	250	250	250	250		
<b>Ground clearance, machine</b>	330	330	350	350	350	350	350	350	350	350	350	350	350	350		
<b>Min. aisle width for 90° stacking with forks</b>	6470	6475	6475	6665	6735	7945	8370	8380	7160	8160	8770	6745	8900 / 13800**	9200 / 13900**		
<b>Turning radius</b>	4180	4180	4180	4360	4360	4360	4785	4785	4785	4785	5175	4570	4785	4785		
<b>Internal turning radius</b>	75	75	75	125	125	125	420	420	420	420	600	270	420	420		
<b>OTHERS</b>	<b>Operating pressure for hydraulics</b>	17,0	17,5	18,0	19,0	16,5	12,5	15,0	17,0	17,0	17,5	18,0	19,0	20,0	20,0	
	<b>Hydraulic oil tank, capacity</b>	220	220	220	220	220	220	220	220	220	220	220	220	220	220	
	<b>Fuel tank, capacity</b>	170	170	170	170	170	170	170	170	170	170	170	170	170	170	
	<b>AdBlue tank, capacity</b>	15	15	15	15	15	15	15	15	15	15	15	15	15	15	

\* Width over attachment  
\*\* Min. aisle width for 90° stacking 20ft container / 40ft container



# Lifting equipment.

Here is how the DCG100-180 helps drivers optimise lifting efficiency and save fuel – at the same time. To begin with, its new electric and hydraulic systems mean quicker response, high lifting speed and increased control. Meanwhile, new load sensing hydraulic pumps improve fuel efficiency. Operating together, this combination improves productivity and saves fuel – every lift.

As lifting equipment plays a vital role in the performance of any forklift, it is important yours match your individual requirements and applications. For instance, careful consideration should be made to factors such as lift height, clearance, free lift, carriage flexibility, etc. in order to optimise operations.

Kalmar offer you a complete range of standard and custom lifting equipment – carriage, fork shaft, forks, levelling, etc – and options to suit your specific lifting and cargo handling requirements.



DUPLEX STANDARD, CLEAR VIEW

Lift height H4	Mast height		Free lift H2	Mast height		Free lift H2
	H3 min	H5 max		H3 min	H5 max	
	DCG100-140*			DCG100-180**		
3000	3015	4515	–	3195	4695	–
3250	3140	4765	–	3320	4945	–
3500	3265	5015	–	3445	5195	–
3750	3390	5265	–	3570	5445	–
4000	3515	5515	–	3695	5695	–
4500	3765	6015	–	3945	6195	–
5000	4015	6515	–	4195	6695	–
5500	4265	7015	–	4445	7195	–
6000	4515	7515	–	4695	7695	–
6500	4765	8015	–	4945	8195	–
7000	5015	8515	–	5195	8695	–

DUPLEX FULL FREE LIFT, CLEAR VIEW

Lift height H4	Mast height		Free lift H2	Mast height		Free lift H2
	H3 min	H5 max		H3 min	H5 max	
	DCG100-140*			DCG100-180**		
3000	3015	4515	1500	3195	4695	1500
3250	3140	4765	1625	3320	4945	1625
3500	3265	5015	1750	3445	5195	1750
3750	3390	5265	1875	3570	5445	1875
4000	3515	5515	2000	3695	5695	2000
4500	3765	6015	2250	3945	6195	2250
5000	4015	6515	2500	4195	6695	2500
5500	4265	7015	2750	4445	7195	2750
6000	4515	7515	3000	4695	7695	3000
6500	4765	8015	3250	4945	8195	3250
7000	5015	8515	3500	5195	8695	3500

TRIPLEX FFL, CW

Lift height H4	Mast height		Free lift H2	Mast height		Free lift H2
	H3 min	H5 max		H3 min	H5 max	
	DCG100-140*			DCG100-180**		
4500	2995	5995	1500	3130	6190	1500
5000	3165	6470	1667	3297	6690	1667
5500	3330	6970	1833	3463	7190	1833
6000	3495	7470	2000	3630	7690	2000
6500	3665	7970	2167	3797	8190	2167
7000	3830	8470	2333	3963	8690	2333

+25 mm on H3 and H5 on the DCG140

\* DCG100-140-6

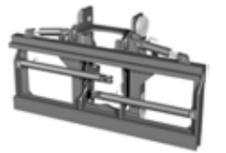
\*\* DCG150-180-6, DCG160-9, DCG100-160-12



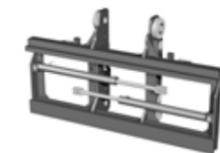
Duplex standard, free visibility



Fixed for manually moveable forks



Centre levelling



Fork positioning and sideshift



Sideshift



Duplex full free lift, free visibility



Forks for manual adjustment



Fork shaft system with separate carriers for each fork



Triplex full free lift, free visibility



Roller fittings for hydraulic adjustment



Hydraulic levelling





# KALMAR

Making your every move count

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