



Kalmar Heavy Forklifts.
DCG180-330

18 – 33 tonne capacity.



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.

Heavy forklifts are Kalmar territory since 1949 – making your material handling the strongest link in the logistic value chain.



4 good reasons to choose Kalmar

Productivity

Product quality, reliability and manoeuvring precision allow operators to work with maximum productivity.

Trust and reliability

Kalmar is a trusted partner, present on all continents and with more than 1,500 service and support staff globally.

Total cost of ownership

Cost-efficient to own and operate thanks to its adaptability, energy conversion and uptime.

Ergonomics and safety

Excellent visibility, low noise level, user-friendly adjustments, and more, ensure excellent ergonomics 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.



**Designed
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-manoeuving.

Our Cummins and Volvo engines are powerful, yet highly fuel efficient. All engine alternatives are compliant with emission standard Stage IV/Tier 4 Final.

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.



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%.

* DCG180-250, lift/lowering speed compared to DCF180-250.

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.

Thanks to improved and more durable components, service intervals have been extended. The first service is due after 500 hours, compared to 50 hours for our previous model.

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.



Fuel-efficient engine.

The new Stage IV/Tier 4 Final compliant engines reduce fuel consumption by up to **5%***.



Economy drive mode.

Using Economy drive mode, fuel consumption is reduced by up to **15%**.



Energy efficient systems.

Optimised variable hydraulic system and variable cooling fan allows for savings 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 **30%** are possible.

** Compared to Kalmar DCF180-330 with Stage IIIB engine.*



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.

Prioritising safety and operator ergonomics.

Safety always comes first. Kalmar makes every effort to guarantee that our machines are safe to operate at every worksite around the world. We spend extensive R&D resources to ensure the driver's environment in the cabin is optimal regarding ergonomics, visibility and noise.

First introduced in 2011, our EGO cabin offers the ultimate in ergonomics and safety. Numerous electronically operated adjustments allow the operator to tailor his workplace. The curved windows, which greatly improve visibility, have already become a classic with Kalmar.

The wheel is tiltable sideways, allowing the operator to temporarily change his visual angle, to see around bulky load in front of him. A new 300 mm lower carriage, available with the DCG180–250 versions, further improves visibility in the forward direction.

The operator console is the operator's extended arm, easy to understand, use and adjust. Designed for maximum ergonomics and flexibility, the console puts controls, switches and indicators within easy reach to the operator, ensuring the most efficient forklift operation possible.







Kalmar Lifetime Services.

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 standardized service modules to meet your business needs.

When the right part matters.

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

24 hrs

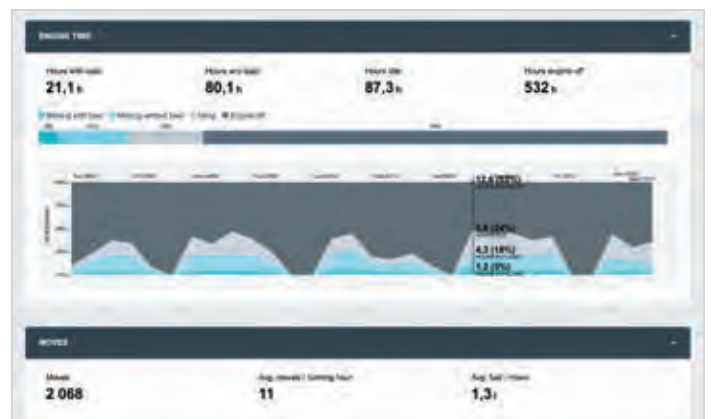
Most of our parts can be delivered to you within 24 hours.



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.



Kalmar Insight: view each machine's movements as they occur.



All the support you need.

Financing options for you.

You may choose to buy your new forklift outright or consider leasing or renting your equipment. Kalmar offers a range of leasing and renting 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 needs. Kalmar can also look at you trading-in your old equipment.



Kalmar Insight: view each operator's performance in real time.



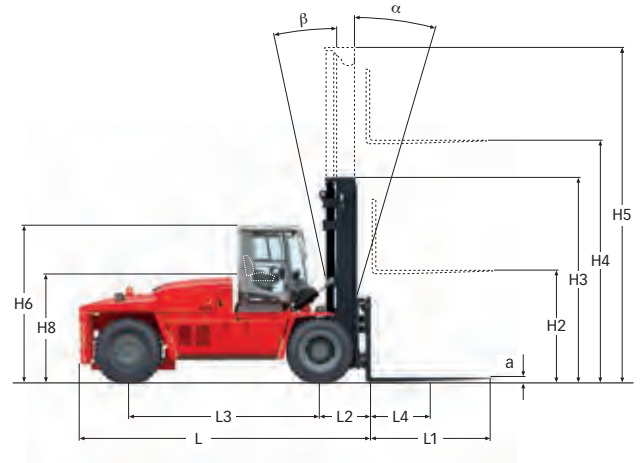
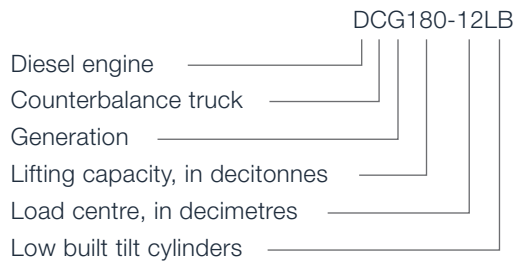
Kalmar Training Academy.

For your team to get the most out of their new forklift the Kalmar Training Academy offers a range of courses for both your technicians and operators. Operators will be shown how to optimise their day-to-day operational performance and what needs to be checked daily before operations begin.

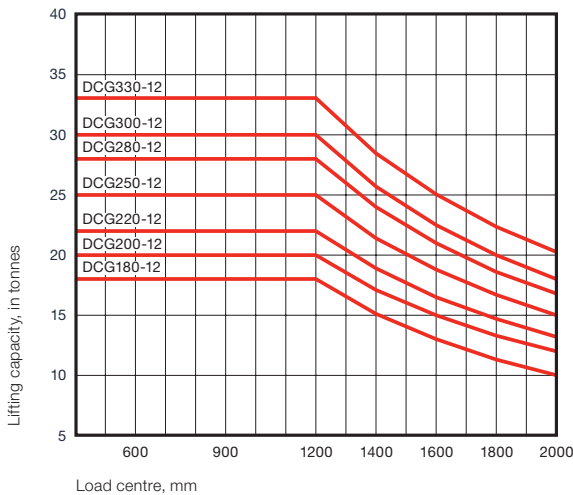
Technicians will be given the knowledge needed to keep your new truck in top condition. Courses are a mix of theory and hands-on experience and can be held at Kalmar or at your site.

Dimensions.

Model designation



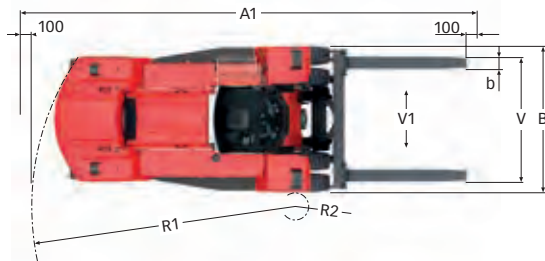
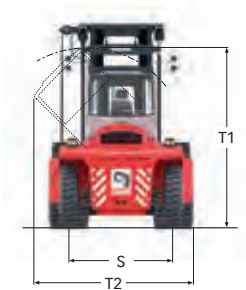
Lifting capacity in tonnes



DCG180-250: Full lifting capacity up to 7000 mm lift height with duplex/duplex freelif mast, integrated sideshift/fork positioning carriage and forkshaft system.

DCG280-330: Full lifting capacity up to 7000 mm lift height with duplex/duplex freelif mast, integrated sideshift/fork positioning carriage and forkshaft system.

MAIN DATA	Model designation		
	Power source		
	Rated capacity / rated load	kg	
	Load center distance	mm	L4
WEIGHTS	Load distance, center of drive axle to fork	mm	L2
	Wheelbase	mm	L3
	Service weight	kg	
	Axle loading, unloaded front	kg	
WHEELS	Axle loading, loaded front	kg	
	Axle loading, unloaded rear	kg	
	Axle loading, loaded rear	kg	
	Type, front / rear		
DIMENSIONS	Tyre size, front	inch	
	Tyre size, rear	inch	
	Number of wheels, front / rear (x = driven wheels)		
	Track width, front / rear	mm	S
OTHERS	Tyre pressure	MPa	
	Mast tilt, α = forward / β = backward	°	α / β
	Height of mast lowered	mm	H3
	Lift height	mm	H4
	Height of mast extended	mm	H5
	Truck height – EGO / OHG cabin roof	mm	H6
	Seat height	mm	H8
	Height when tilting EGO cab / OHG	mm	T1
	Width when tilting EGO cab / OHG	mm	T2
	Truck length (to face of forks)	mm	L
	Truck width	mm	B
	Fork dimensions, width	mm	b
	Fork dimensions, thickness	mm	a
	Fork dimensions, length of fork arm	mm	l
	Fork carriage width	mm	b3
	Width over fork arms, minimum / maximum	mm	V
Sideshift \pm @ width over forks	mm	V1 / V	
Ground clearance, laden, below mast	mm		
Ground clearance, machine	mm		
Min. aisle width for 90° stacking with forks	mm	A1	
Turning radius	mm	R1	
Internal turning radius	mm	R2	
OTHERS	Operating pressure for hydraulics	MPa	
	Hydraulic oil tank, capacity	l	
	Fuel tank, capacity	l	
	AdBlue tank, capacity	l	



DCG180-12

DCG200-12

DCG220-12

DCG250-12

DCG280-12

DCG300-12

DCG330-12

DCG180-12	DCG200-12	DCG220-12	DCG250-12	DCG280-12	DCG300-12	DCG330-12
Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel
18000	20000	22000	25000	28000	30000	33000
1200	1200	1200	1200	1200	1200	1200
1070	1070	1070	1070	1125	1125	1125
4000	4000	4000	4250	4750	4750	4750
28500	29800	31200	32900	38300	39500	41500
15000	15000	15000	15500	20500	20500	20500
43200	46300	49500	53800	61700	64900	68800
13500	14800	16200	17400	17800	19000	21000
3300	3500	3700	4100	4100	4300	4800

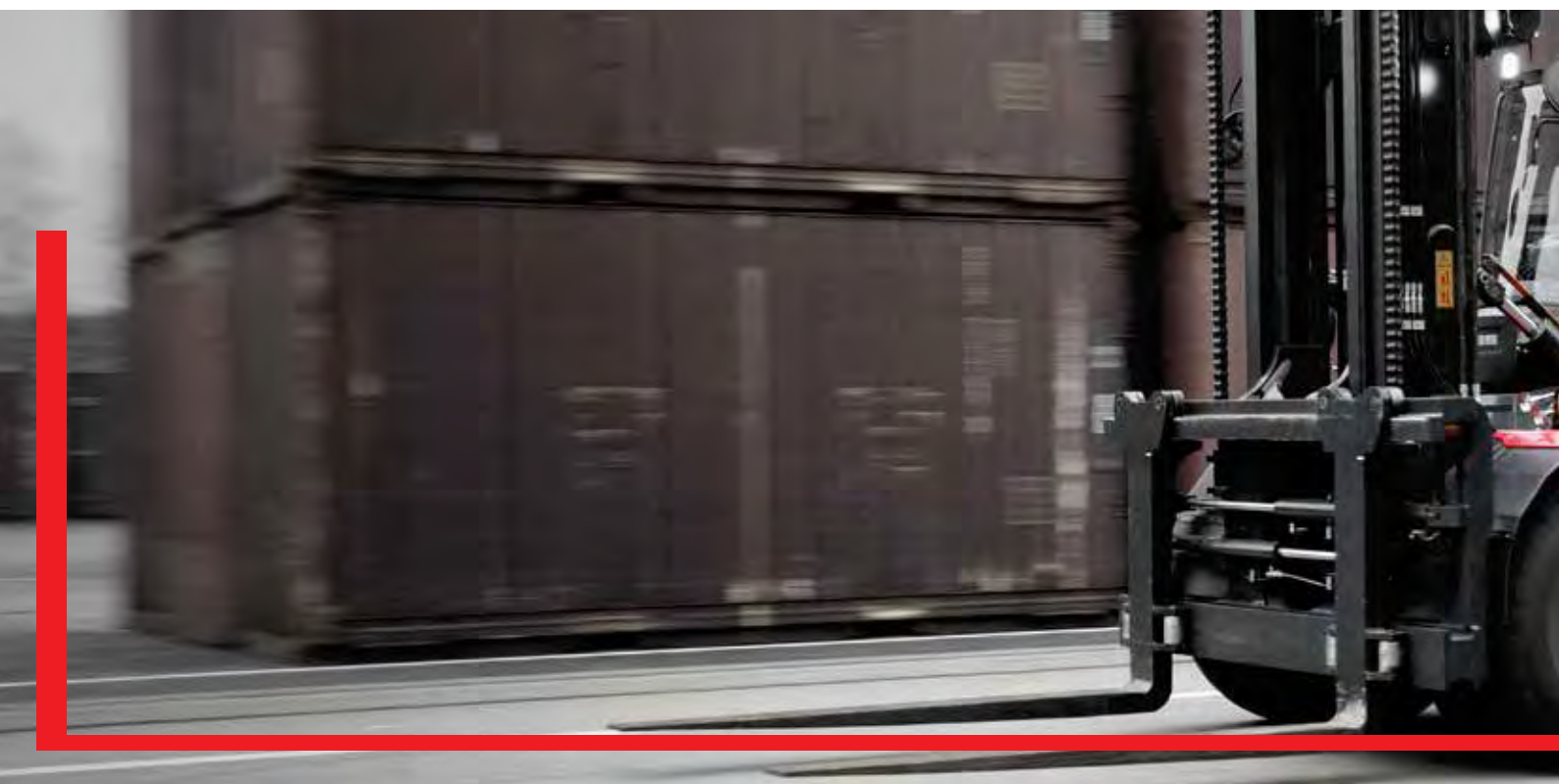
Pneumatic / Pneumatic

14.00x24	14.00x24	14.00x24	14.00x24	16.00x25	16.00x25	16.00x25
14.00x24	14.00x24	14.00x24	14.00x24	16.00x25	16.00x25	16.00x25
4* - 2	4* - 2	4* - 2	4* - 2	4* - 2	4* - 2	4* - 2
2200 / 2140	2200 / 2140	2200 / 2140	2200 / 2140	2540 / 2440	2540 / 2440	2540 / 2440
1,0	1,0	1,0	1,0	1,0	1,0	1,0
5 / 10	5 / 10	5 / 10	5 / 10	5 / 10	5 / 10	5 / 10
4320	4320	4320	4320	4520	4520	4520
5000	5000	5000	5000	5000	5000	5000
6820	6820	6820	6820	7020	7020	7020
3270	3270	3300	3270	3415	3415	3415
2150	2150	2150	2150	2300	2300	2300
3800	3800	3800	3800	3800	3800	3800
3700	3700	3700	3700	3800	3800	3800
6090	6090	6090	6340	6925	6925	6925
3050	3050	3050	3050	3430	3430	3430
250	250	250	250	300	300	300
110	110	110	110	110	110	110
2400	2400	2400	2400	2400	2400	2400
2700 / 800	2700 / 800	2700 / 800	2700 / 800	3150 / 850	3150 / 850	3150 / 850
557 / 1585	557 / 1585	557 / 1585	557 / 1585	575 / 2000	575 / 2000	575 / 2000
-	-	-	-	-	-	-
300	300	300	300	300	300	300
9270	9270	9270	9550	10325	10325	10325
5600	5600	5600	5875	6600	6600	6600
425	425	425	550	950	950	950
16.5	18	20	22	19.5	20.5	22
330	330	330	330	330	330	330
300	300	300	375	450	450	450
35	35	35	35	35	35	35

Drive train and performance.

		DCG180-250	DCG280-330						
ENGINE	Manufacturer's type designation	Cummins QSB6,7 (Turbo-Intercooler)	Cummins QSB6,7 (Turbo-Intercooler)						
	Fuel, type of engine	Diesel, 4-stroke	Diesel, 4-stroke						
	Rating ISO 3046 / at revs	168 / 2200	168 / 2200						
	Peak power at revs	188 / 1900	188 / 1900						
	Power at machine max revs	186 / 2000	172 / 2150						
	Peak torque ISO 3046 / at revs	1186 / 1300	1186 / 1300						
	Number of cylinders / displacement	6 / 6686	6 / 6686						
	Fuel consumption, normal driving	9-11	13-15						
	AdBlue consumption, normal driving	4-6	4-6						
	Emission standard	EU Stage V / USA EPA Tier 4(f)	EU Stage V / USA EPA Tier 4(f)						
GEARBOX & MISC	Manufacturer's type designation	Dana TE17000	Dana TE17000						
	Clutch, type	Torque converter	Torque converter						
	Gearbox, type	Hydrodynamic Powershift	Hydrodynamic Powershift						
	Numbers of gears, forward / reverse	3 / 3	3 / 3						
	Alternator, type / power	AC / 1960	AC / 1960						
	Starting battery, voltage / capacity	2x12 / 145	2x12 / 145						
	Driving axle, manufacturer / type	Kessler D91 / Differential and hub reduction	AxleTech PRC3806 / Differential and hub reduction						
PERFORMANCE, CUMMINS QSB6,7	Lifting speed	Unloaded (m/s)	0.39	0.39	0.39	0.39	0.37	0.37	0.37
		At 80% rated load (m/s)	0.37	0.37	0.37	0.37	0.35	0.35	0.35
	Lowering speed	Unloaded (m/s)	0.34	0.34	0.34	0.34	0.32	0.32	0.32
		At rated load (m/s)	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	Travelling speed, F / R	Unloaded (km/h)	27 / 27	27 / 27	27 / 27	27 / 27	27 / 27	27 / 27	27 / 27
		At rated load (km/h)	23 / 23	23 / 23	223 / 23	23 / 23	24 / 24	24 / 24	24 / 24
	Gradeability, max.	Unloaded (%)	91	84	78	72	61	59	55
		At rated load (%)	45	41	38	35	31	30	27
	Gradeability, at 2 km/h	Unloaded (%)	60	56	53	49	43	41	39
		At rated load (%)	33	30	28	26	23	22	20
	Drawbar pull	Max. (kN)	189	189	189	189	197	197	197
	Noise level, inside	LpAZ*, EGO cabin (dB(A))	75	75	75	75	75	75	75
		LpAZ*, EGO cabin OHG (dB(A))	-	-	-	-	-	-	-
	Noise level, outside	LWA** (dB(A))	110	110	110	110	110	110	110

* Noise level according to EN12053 ** Noise level according to 2000/14/EC



ENGINE	Manufacturer's type designation	
	Fuel, type of engine	
	Rating ISO 3046 / at revs	kW / rpm
	Peak power at revs	kW / rpm
	Power at machine max revs	kW / rpm
	Peak torque ISO 3046 / at revs	Nm / rpm
	Number of cylinders / displacement	cm³
	Fuel consumption, normal driving	l/h
	AdBlue consumption, normal driving	% of diesel
Emission standard		

	DCG180-250	DCG280-330
Volvo TAD 871VE (Turbo-Intercooler)	Volvo TAD 871VE (Turbo-Intercooler)	Volvo TAD 871VE (Turbo-Intercooler)
Diesel, 4-stroke	Diesel, 4-stroke	Diesel, 4-stroke
185 / 2200	185 / 2200	185 / 2200
-	-	-
-	-	-
1160 / 1200	1160 / 1200	1160 / 1200
6 / 7700	6 / 7700	6 / 7700
8-11	8-11	12-14
3-5	3-5	3-5
Stage IV / Tier 4 final	Stage IV / Tier 4 final	Stage IV / Tier 4 final

GEARBOX & MISC	Manufacturer's type designation	
	Clutch, type	
	Gearbox, type	
	Numbers of gears, forward / reverse	
	Alternator, type / power	W
	Starting battery, voltage / capacity	V / Ah
	Driving axle, manufacturer / type	

Dana TE17000	Dana TE17000
Torque converter	Torque converter
Hydrodynamic Powershift	Hydrodynamic Powershift
3 / 3	3 / 3
AC / 3080	AC / 3080
2x12 / 145	2x12 / 145
Kessler D91 / Differential and hub reduction	AxleTech PRC3806 / Differential and hub reduction

PERFORMANCE, VOLVO TAD 871VE	Lifting speed	Unloaded (m/s)	
		At rated load (m/s)	
	Lowering speed	Unloaded (m/s)	
		At rated load (m/s)	
	Travelling speed, F / R	Unloaded (km/h)	
		At rated load (km/h)	
	Gradeability, max.	Unloaded (%)	
		At rated load (%)	
	Gradeability, at 2 km/h	Unloaded (%)	
		At rated load (%)	
	Drawbar pull	Max. (kN)	
	Noise level, inside	LpAZ*, EGO cabin (dB(A))	
	LpAZ*, EGO cabin OHG (dB(A))		
Noise level, outside	LWA** (dB(A))		

	DCG180-12	DCG200-12	DCG220-12	DCG250-12	DCG280-12	DCG300-12	DCG330-12
0.33	0.33	0.33	0.33	0.35	0.35	0.35	
0.32	0.32	0.32	0.32	0.33	0.33	0.33	
0.38	0.38	0.38	0.38	0.38	0.38	0.38	
0.38	0.38	0.38	0.38	0.38	0.38	0.38	
24 / 24	24 / 24	24 / 24	24 / 24	24 / 24	24 / 24	24 / 24	
23 / 23	23 / 23	23 / 23	23 / 23	23 / 23	23 / 23	23 / 23	
74	69	65	60	65	62	58	
38	35	32	29	32	30	28	
51	48	44	41	43	41	39	
28	26	24	22	24	22	21	
173	173	173	173	213	213	213	
72	72	72	72	73	73	73	
-	-	-	-	-	-	-	
109	109	109	109	110	110	110	

* Noise level according to EN12053 ** Noise level according to 2000/14/EC



Lifting equipment.

We offer a full range of duplex, triplex and free-lift equipment. Based on our long tradition as a supplier of heavy forklifts, our lifting equipment is robust and of the highest quality.

	Lift height H4	Mast height		Free lift H2	Mast height		Free lift H2
		H3 min	H5 max		H3 min	H5 max	
			DCG180-250			DCG280-330	
DUPLEX STD	3500			-			
	4000	3820	5820	-	4020	6020	-
	4500	4070	6320	-	4270	6520	-
	5000	4320	6820	-	4520	7020	-
	5500	4570	7320	-	4770	7520	-
	6000	4820	7820	-	5020	8020	-
	6500	5070	8320	-	5270	8520	-
7000	5320	8820	-	5520	9020	-	

	Lift height H4	Mast height		Free lift H2	Mast height		Free lift H2
		H3 min	H5 max		H3 min	H5 max	
			DCG180-250			DCG280-330	
DUPLEX FFL	3500						
	4000	3920	5920	2000	4020	6020	2000
	4500	4170	6420	2250	4270	6520	2250
	5000	4420	6920	2500	4520	7020	2500
	5500	4670	7420	2750	4770	7520	2750
	6000				5020	8020	3000

	Lift height H4	Mast height		Free lift H2	Mast height		Free lift H2
		H3 min	H5 max		H3 min	H5 max	
			DCG180-250			DCG280-330	
TRI.	4550	3500	6350	1700	-	-	-
	4625	-	-	-	3680	6630	1625
	5150	3700	6950	1900	-	-	-
	5900	-	-	-	4220*	8150*	2080
	6500	4150	8300	2350	-	-	-

* Might be slightly reduced if smallest available tyres are chosen.

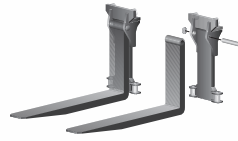




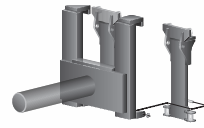
Carriage sideshift / fork positioning



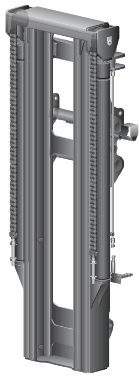
Carriage with kissing forks for steel handling



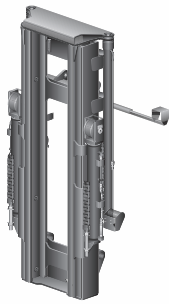
Fork shaft system (Hook on type or roller type)



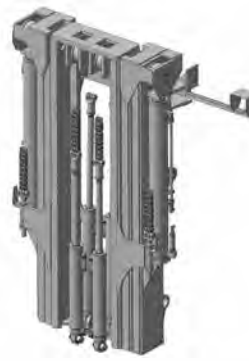
Coil ram



Duplex standard



Duplex free lift



Triplex full free lift






KALMAR

Standard equipment.

Chassis/Body

- Towing pin
- Steps with anti slip protection
- Rear view mirror left and right side mounted on front mudguards
- Strong and protective mudguards

Cabin

- EGO Cabin
- Clear and tempered panes of safety glass, thickness 6 mm
- Std seat incl. 2-point belt with (orange).
- Clear windows incl. sliding windows in left and right door.
- Complete doors with locks left and right side.
- Complete manoeuvre system right hand console incl. light controls, toggle wheel for display, levers for load handling system (electric adjustable, 2-way's.)
- Multi function lever left side incl. horn, turn signal.
- Brake system with pedal left and right side.
- Internal comfort incl. mirror, handles, interior lighting etc.
- Wiper and washers front/rear and roof window.
- Hydraulic steering system incl. electrically adjustable steering wheel in height-, manually adjustable laterally and longitudinally with steering wheel knob.
- External reverse lights.
- Cab tilting
- Instep handle, left side
- Automatic heat and ventilation (ECH) with fresh air inlet filter.
- Speed control pedal right side.
- Kalmar std Key system.
- Cup holder
- Coat hook
- Colour display:
 - Fuel level, indicator.
 - Engine, transmission temperature.
 - Oil pressure engine.
 - Battery voltage.
 - Clock and date.
 - Hour meter.
 - Service time indicator.
 - Speed.
 - Engine speed (RPM).
 - Various information via pop-up.
 - AdBlue indicator

Steering system

- Steering axel Kalmar, including double acting steering cylinder.

Drivetrain

- Driveaxle DCG180-250: Kessler
DCG280-330: Axletech

Hydraulics

- Electrical servo
- Level sight glass on hydraulic oil tank
- Variable pumps
- High pressure filter
- Automatic raised engine rpm when load handling function is used
- Tilt angels std 5F/10B

Electric system

- Electrical system 24 V,
- Rear lights and brake lights, LED.
- Working lights on front mudguards, LED.
- Working light mast 2 pcs.
- Indicator lamps incl. hazard lights, LED..
- Main power switch

Wheels

- Continental
DCG180-250 14.00x24
DCG280-330 16.00x25

Fleet management

- Equipped with telemetric hardware for Kalmar Insight.

Color

- Cab: frame RAL 7011/70", covers "RAL 7021/10"
- Chassis: Kalmar Red 2012 (Base ref.RAL 3000/75)
- Lifting equipment: Kalmar Black (Base ref.RAL 7021/30)

Documentation & decals

- Operators manual
- Maintenance manual
- Parts catalouge
- Load diagram in cab
- Warning decals
- Information decals
- Diagram, fuses
- Noise plate (legal requirement in EU/EEC)



KALMAR

Making your every move count

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