

# Quality for all.

The Kalmar  
22,000 - 40,000 lbs  
Essential Forklift Range.



Kalmar Essential Range



**KALMAR**

# Exceeding your expectations.

The Kalmar Essential Range of forklifts gives you everything you expect from Kalmar – a quality build with high availability and excellent productivity for a very competitive price.

Kalmar forklifts are built to take on your toughest loads, making them ideal for demanding applications like container, steel and wood handling. Our forklifts are available with capacities from 22,000 - 40,000 lbs, three different masts, and four different carriages to match your exact lifting needs. The range of Essential forklifts will exceed your expectations.

## Kalmar quality for all.



**Expect greater value.** Built on our proven platform, our Essential Range of forklifts deliver everything you need in a medium sized forklift, without compromise. You get a great truck, at a great price.



**Expect Kalmar quality.** Robust, reliable and with market leading availability, Kalmar trucks are designed to last, which is why they command the highest resale values in the market.



**Expect a safer truck.** The safety of your drivers and employees is critically important to us, which is why all Kalmar forklifts come with a wide range of safety features as standard.



**Expect more support.** Kalmar has a full range of support services including KalmarCare, Kalmar Genuine Parts and the Kalmar Academy, where drivers and service technicians can learn more about their new forklifts.

### Mast options.

**Duplex mast:**  
138-276"

**Duplex full free mast:**  
138-276"

**Triplex full free mast:**  
177-276"



### Lifting capacities.

Lifting capacities in lbs.



# Built on a proven platform.

We know you want a reliable machine, which is why our range of forklifts have been built on a proven and tested platform. You will benefit from:

**A standard driver interface** across the platform, making it easier for your operators to drive consistently and safely.

**A color HMI screen** and control system with improved diagnostic tools, so troubleshooting time is reduced, and high availability is maintained.

**A common electrical system** that helps with quick and easy troubleshooting by using common error codes.

Only built with **branded quality components** from leading manufacturers.

**Proven chassis design** with high stability and durability.

**More than 10,000 machines** already built on this platform.



# Keeping your drivers comfortable and safe.

## Introducing the Essential cabin.

The Kalmar Essential cabin has everything your drivers need to operate at their best. The well-designed, spacious cabin offers great visibility both forward and backward. You get an adjustable seat, power-assisted steering, and easy lift operation with control levers or an optional joystick. Keeping your drivers comfortable and in full control.

### **A safer operating environment.**

Every Kalmar forklift comes with non-slip steps and handrails for safe three-point access to the cabin. The cabin has doors on both sides so the driver can exit from either side in case of an emergency. All servicing points are at ground level to reduce the risk of injury from falling. The entire Essential Range of machines complies with the most recent operator health and safety guidelines and can be equipped with additional optional safety features, making your operations as safe as possible.



Spacious and well designed cabin.



Safe, three point access.

# Efficient and easy to maintain.

## A forklift built for efficiency.

The powerfully efficient 173hp Volvo engine is Tier 4 Final emissions compliant and is combined with a highly efficient gearbox and drive axle. Our gear pumps are extremely reliable, easy to service and come in three different capacities, depending on the size of your forklift.

## Three cabin choices.

Fully enclosed cabin.



Partially enclosed with no doors.



Full open cabin with no doors or windows.



## Two cabin positions.

- Standard mounted cabin
- Raised (11.8") cabin



## Extra efficient:

**Lift & lowering speeds**  
 ↑ 1.1ft/sec without load  
 ↑ 1.0ft/sec with load  
 ↓ 1.3ft/sec without load  
 ↓ 1.3ft/sec with load

**Top speed** 19mph

**Volvo engine rating** 173 hp Tier 4 Final



## Optimize your forklift with Insight.

Kalmar Insight is a powerful equipment optimization tool that can help you get more from your fleet. Data is streamed directly from your equipment, analyzed and then displayed in an accessible and easy-to-use graphic interface. You will be able to assess the equipment's key performance data and adapt your operational processes to improve both efficiency and productivity.

Kalmar Insight enables you to manage your operations more effectively, decrease downtime and improve safety at your site.



Kalmar Insight, a real-time optimization tool.

## Easy to maintain, with industry leading service intervals.

Performing daily inspections and routine servicing is quick and convenient with all check points directly accessible at ground level. The electrical cabinet is easy to access and, when the cabin is raised, the hydraulic filters, servicing points and the entire drivetrain can be reached from one location. With industry-leading service intervals of 500 hours, your machine will spend less time being maintained and more time working.

## 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 optimize their day-to-day operational performance and what needs to be checked daily on the truck before operations begin.

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

# Kalmar has a range of options for you to choose from:

## For the cabin:

- You can choose to have your cabin mounted 11.8" higher for better visibility.
- Your cabin can be fully enclosed, partially enclosed or fully open.
- You can choose to add air-conditioning or sun screens to protect your drivers from the sun.
- You can choose additional grid protection for enhanced driver safety when handling items that may fall, like wood or other debris.
- Or upgrade to a premium GRAMMER seat with additional dampening for the ultimate in operator comfort.

## For the machine:



**Rear Mounted Camera.** Knowing what's going on behind you is critical when other personnel are present. A rear mounted camera can provide real-time information to an in-cabin display, helping improve personnel and driver safety.



**LED Blue Safety Light.** To protect bystanders in noisy environments, a blue LED safety light can be fitted. The safety light projects onto the ground behind the forklift, so bystanders can see which direction the forklift is moving and do not need to rely on hearing the machine.



**Reverse Travel Alarm System.** Working side by side with moving vehicles always involves some safety risks. Installing a reverse travel alarm system provides a clear acoustic alert when the forklift is reversing, so personnel are sure to stay out of harm's way.



**Speed Limiter.** Allows a trained service technician to set a safe speed limit on the forklift that your operators cannot exceed.



**Additional lighting.** Extra lighting brings greater operational visibility and safety for personnel working at your site, particularly at night. You can choose from:

- Flashing brake lights when reversing
- Additional lights on the mast (2 pc)
- Additional lights on the cabin roof (2 pc).



**Electronic Inching.** When you are lifting heavy loads, you will need additional power. Electronic Inching allows you to maintain high engine revs for the hydraulic system without engaging the drive in the gearbox. This is achieved by releasing the clutch electronically prior to revving the engine.



**Central Greasing:** By installing a central greasing system, you can be certain that your machine components are fully lubricated when they need to be, no matter where they are or how difficult it is to access them. Keeping them fully lubricated will reduce your servicing and component replacement costs.



# All the support you need.

## 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. 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 organization

#### 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 terminal
- Improved availability of machines

#### Kalmar Complete Care

We meet your complete maintenance requirements.

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

#### Kalmar Optimal Care

We optimize 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.





# Performance.

		DCG 100-6T	DCG 120-6T	DCG 127-6T	DCG 140-6T	DCG 150-6T	DCG 100-12T	
PERFORMANCE, VOLVO TAD571VE	<b>Lifting speed</b>	Unloaded (ft/s)	1.5	1.1	1.1	1.1	1.1	1.1
		At 80 % of rated load (ft/s)	1.3	1.0	1.0	1.0	1.0	1.0
	<b>Lowering speed</b>	Unloaded (ft/s)	1.3	1.3	1.3	1.3	1.3	1.3
		At rated load (ft/s)	1.3	1.3	1.3	1.3	1.3	1.3
	<b>Traveling speed, F/R</b>	Unloaded (mph)	18	18	18	18	18	18
		At rated load (mph)	17	17	17	17	17	17
	<b>Gradeability, max.</b>	Unloaded (%)	94	87	82	80	59	66
		At rated load (%)	45	39	36	33	30	37
	<b>Gradeability, at 1.2 mph</b>	Unloaded (%)	73	67	61	60	47	51
		At rated load (%)	36	33	30	29	25	31
<b>Drawbar pull</b>	Max. (lbf)	22,300	22,300	22,300	22,300	22,300	22,300	
<b>Noise level, inside</b>	LpAZ*, Essential cabin (dB(A))	76	76	76	76	76	76	
	LpAZ*, Essential OHG (dB(A))							
<b>Noise level, outside</b>	LWA** (dB(A))	108	108	108	108	108	108	

		DCG 120-12T	DCG 150-12T	DCG 160-6T	DCG 160-9T	DCG 160-12T	DCG 180-6T	
PERFORMANCE, VOLVO TAD571VE	<b>Lifting speed</b>	Unloaded (ft/s)	1.1	1.1	1.1	1.1	1.1	1.1
		At 80 % of rated load (ft/s)	1.0	1.0	1.0	1.0	1.0	1.0
	<b>Lowering speed</b>	Unloaded (ft/s)	1.3	1.3	1.3	1.3	1.3	1.3
		At rated load (ft/s)	1.3	1.3	1.3	1.3	1.3	1.3
	<b>Traveling speed, F/R</b>	Unloaded (mph)	18	18	18	18	18	18
		At rated load (mph)	17	16	16	16	16	16
	<b>Gradeability, max.</b>	Unloaded (%)	60	49	62	53	49	51
		At rated load (%)	33	27	29	27	27	25
	<b>Gradeability, at 1.2 mph</b>	Unloaded (%)	47	40	49	43	40	41
		At rated load (%)	27	23	25	23	23	22
<b>Drawbar pull</b>	Max. (lbf)	22,300	22,300	22,300	22,300	22,300	22,300	
<b>Noise level, inside</b>	LpAZ*, Essential cabin (dB(A))	76	76	76	76	76	76	
	LpAZ*, Essential OHG (dB(A))							
<b>Noise level, outside</b>	LWA** (dB(A))	108	108	108	108	108	108	

# Drivetrain.

## Volvo TAD571VE ZF 3WG161 (173 hp)

		Volvo TAD571VE (Turbo-Intercooler)
ENGINE	Manufacturer's type designation	Volvo TAD571VE (Turbo-Intercooler)
	Fuel, type of engine	Diesel, 4-stroke
	Rating ISO 3046 / at revs	hp / rpm 173 / 2,300
	Peak torque ISO 3046 / at revs	lbf-ft / rpm 597 / 1,100-1,500
	Number of cylinders / displacement	in <sup>3</sup> 4 / 313
	Fuel consumption, normal driving	gal/h 1.8-2.4
	Diesel Exhaust Fluid (DEF) consumption, normal driving	% of diesel 4-6
	Emission standard	Tier 4 Final
GEARBOX & MISC.	Manufacturer's type designation	ZF 3WG161
	Clutch, type	Torque converter
	Gearbox, type	Hydrodynamic Powershift
	Numbers of gears, forward / reverse	3 / 3
	Alternator, type / power	Amp AC / 110
	Starting battery, voltage / capacity	V / Ah 2x12 / 150
	Driving axle, manufacturer / type	Kessler / Differential and hub reduction**

(33,000 - 40,000 lbs.) models

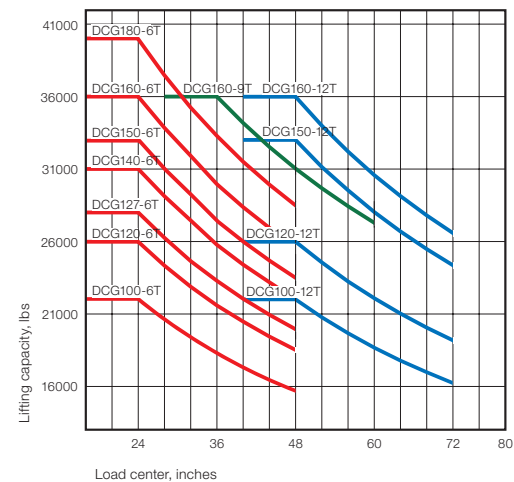
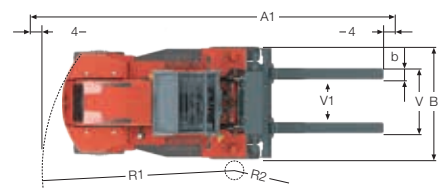
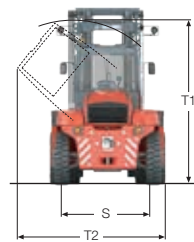
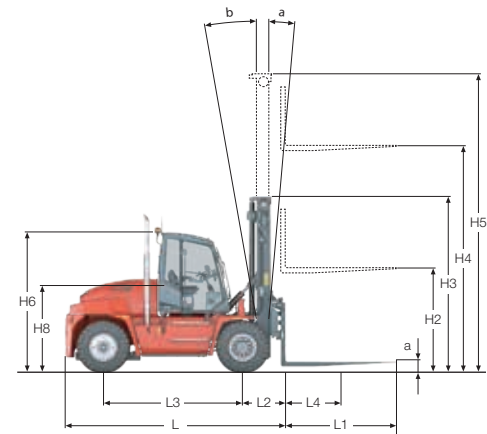
\* DCG100-140-6T, DCG100-12T Kessler D61

\*\* DCG120-12T, DCG150-6-DCG180-6T Kessler D81



# Lifting data.

	Lift height		Mast height		Free lift
	H4	H3 min	H5 max	H2	H2
<b>DCG100-180T</b>					
	118	126	185	-	-
	128	131	195	-	-
	138	136	205	-	-
	148	141	214	-	-
	157	145	224	-	-
	167	150	234	-	-
	177	155	244	-	-
	187	160	254	-	-
	197	165	264	-	-
	217	175	283	-	-
	236	185	303	-	-
	256	195	323	-	-
	276	205	342	-	-



Full lifting capacity up to 197" lift height with duplex/duplex freelift/triplex masts and integrated sideshift/fork positioning carriage.

# Standard.

## Cabin

- Standard seat with 2-pc belt mechanical suspension
- Full suspension seat with adjustable backrest angle
- Armrest adjustable for height and reach, on right side
- Steering wheel with spinner
- Tilttable steering wheel column
- Levers installed in steering column (shifting, direction indicators)
- Brake pedal
- Electronic accelerator pedal.

## For closed cabin

- Window panes on roof and rear (tempered), and front (tinted and laminated)
- Heater unit with directed vents
- Wiper and washer system for front pane.

## Drive train

- Steering axle: Kalmar
- Drive axle: Kessler D61/81
- Automatic gear shift with declutch, possible to change to manual gearshift.

## Hydraulics

- Electrical servo
- 2 functions lift, tilt
- Level sight glass on hydraulic oil tank
- Tilt angles std 10°/14°B.

## Body

- Tilttable cab
- Steps with anti-slip protection.
- Lifting eyes in mast.

## Electrical system

- Electrical system 24 V
- Rear combination brake/indicator lights, LED
- Rear cab mounted work lights 2 pcs, LED
- Working lights front fenders 2 pcs, LED
- Working lights mast 2 pcs, LED
- Front indicator lights, LED
- Mechanical main power switch.

## Wheels

- DCG100-160T: 12.00x20/20PR
- DCG180T: 12.00x20/20PR HD.

## 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 and decals

- Operators manual (electronic)
- Maintenance manual (electronic)
- Parts catalog (electronic).



DUPLEX STANDARD, CLEAR VIEW

DUPLEX FULL FREE LIFT, CLEAR VIEW

TRIPLEX FFL, CLEARVIEW





# KALMAR

Making your every move count

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