Quality for all.

Introducing the Kalmar 10 -18 ton Essential Forklift Range.

Kalmar Essential Range

KALMAR

Exceeding your expectations.

The new Kalmar Essential Forklift Range 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 lifting capacities from 10 -18 tons and three different masts to match your exact lifting needs. Our new range of Essential Forklifts will exceed your expectations.

Kalmar quality for all.

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

Expect greater value. Built on our proven platform, our new Essential Range delivers everything you need in a medium sized forklift, without compromise. You get a great machine, at a great price.

Expect a safer machine. 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 Kalmar Care, Kalmar Genuine Parts and the Kalmar Academy, where drivers and service technicians can learn more about their new forklifts.

Mast options.

Duplex mast:
3000-7000 mm

Duplex full free mast:
3000-7000 mm

Triplex full free mast:
4500-7000 mm

Lifting capacities.

Lifting capacities in tons.

Built on a proven platform.

We know you want a reliable machine, which is why our new 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 new 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. An adjustable seat, power-assisted steering, and easy lift operation with control levers or an optional joy stick. 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.
You get the choice of four different Volvo engines, including a new smaller yet highly efficient 105 kW version. The engines are compliant with either Stage 4/Tier 4 Final or Stage 3A/Tier 3 emissions standards and are 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 (300 mm) cabin

Extra efficient:

Lift & lowering speeds	↑ 0,35 m/sec without load ↑ 0,29 m/sec with load ↓ 0,40 m/sec without load ↓ 0,40 m/sec with load
Top speed	30km/h
Volvo engine ratings	105 & 129kW Stage4/Tier 4 105 & 129kW Stage3A/Tier 3

Optimise your forklift with SmartFleet.

SmartFleet is a powerful equipment optimisation tool that can help you get more from your fleet. Data is streamed directly from your equipment, analysed 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 SmartFleet enables you to manage your operations more effectively, decrease downtime and improve safety at your site.

SmartFleet, a real-time optimisation 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 optimise 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 new 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 300 mm 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 Beeper System. Working side by side with moving vehicles always involves some safety risks. Installing a reverse beeper 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 you 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 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.

				DCG100-6T	DCG120-6T	DCG127-6T	DCG140-6T	DCG150-6T	DCG100-12T	DCG120-12T	DCG150-12T	DCG160-6T	DCG160-9T	DCG160-12T	DCG180-6T
MAIN DATA	Model designation			DCG100-6T	DCG120-6T	DCG127-6T	DCG140-6T	DCG150-6T	DCG100-12T	DCG120-12T	DCG150-12T	DCG160-6T	DCG160-9T	DCG160-12T	DCG180-6T
	Power source			Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel	Diesel
	Rated capacity / rated load	kg		10000	12000	12700	14000	15000	10000	12000	15000	16000	16000	16000	18000
	Load center distance	mm	L4	600	600	600	600	600	1200	1200	1200	600	900	1200	600
	Load distance, center of drive axle to fork	mm	L2	895	900	900	910	980	990	990	1000	980	990	1000	990
	Wheelbase	mm	L3	3000	3000	3000	3250	3250	3250	3500	3750	3500	3500	3750	3500
WEIGHTS	Service weight	kg		16200	16700	17200	17500	19800	19100	20300	22100	19600	21600	23100	20800
	Axle loading, unloaded front	kg		8700	8800	8800	9000	10300	10500	10700	10900	10400	10600	11200	10400
	Axle loading, loaded front	kg		23700	26700	27850	29500	23600	27200	30200	34700	33600	35200	36600	36600
	Axle loading, unloaded rear	kg		7500	7900	8400	8500	9500	8600	9600	11200	9200	11000	11900	10400
	Axle loading, loaded rear	kg		2500	1900	2050	2000	2200	1900	2100	2400	2000	2400	2500	2200
WHEELS	Type, front / rear														
	Tyre size, front	inch				12,00×20/20PR									12,00×20/20PR HD
	Tyre size, rear	inch				12,00×20/20PR									12,00×20/20PR HD
	Number of wheels, front / rear (x = driven wheels)			4x / 2	4x / 2	4x / 2	4x / 2	4x / 2	4x / 2	4x / 2	4x / 2	4x / 2	4x / 2	4x / 2	4x / 2
	Track width, front / rear	mm	S	1840 / 1960	1840 / 1960	1855 / 1960	1855 / 1960	1855 / 1960	1855 / 1960	1855 / 1960	1855 / 1960	1855 / 1960	1855 / 1960	1855 / 1960	1855 / 1960
	Tyre pressure	MPa		0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1	1	1
DIMENSIONS	Mast tilt, ∂ = forward / ß = backward	°	∂ / ß	5 / 10	5 / 10	5 / 10	5 / 10	5 / 10	5 / 10	5 / 10	5 / 10	5 / 10	5 / 10	5 / 10	5 / 10
	Height of mast lowered	mm	H3	4015	4015	4035	4035	4195	4195	4195	4195	4195	4195	4195	4195
	Lift height	mm	H4	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000
	Height of mast extended	mm	H5	6515	6515	6535	6535	6535	6535	6535	6535	6535	6535	6535	6535
	Truck height – Essential cabin roof	mm	H6	2960	2960	2985	2985	2985	2985	2985	2985	2985	2985	2985	2985
	Seat height	mm	H8	1745	1745	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770
	Height when tilting Essential cab	mm	T1	3195	3195	3220	3220	3220	3220	3220	3220	3220	3220	3220	3220
	Width when tilting Essential cab	mm	T2	3470	3470	3500	3500	3500	3500	3500	3500	3500	3500	3500	3500
	Truck length (to face of forks)	mm	L	4720	4725	4725	4985	5055	5065	5315	5325	5305	5315	5575	5065
	Truck width	mm	B	2480	2480	2540	2540	2540	2540	2540	2540	2540	2540	2540	2540
	Fork dimensions, width	mm	b	200	200	200	200	200	220	220	250	200	220	250	220
	Fork dimensions, thickness	mm	a	65	70	70	80	80	90	90	100	80	90	100	90
	Fork dimensions, length of fork arm	mm	l	1200	1200	1200	1200	1200	2400	2400	2400	1200	1800	2400	1200
	Fork carriage width	mm	b3	2450	2450	2450	2450	2500	2500	2500	2500	2500	2500	2500	2500
	Width over fork arms, minimum / maximum	mm	V	2330 / 570	2330 / 570	2330 / 570	2330 / 570	2360 / 600	2360 / 640	2360 / 640	2360 / 700	2360 / 600	2360 / 640	2360 / 700	2360 / 640
	Sideshift ± @ width over forks	mm	V1 / V	440 / 1450	440 / 1450	440 / 1450	440 / 1450	440 / 1480	430 / 1500	430 / 1500	415 / 1530	440 / 1480	430 / 1500	415 / 1530	430 / 1500
	Ground clearance, laden, below mast	mm		250	250	250	250	250	250	250	250	250	250	250	250
	Ground clearance, machine	mm		330	330	350	350	350	350	350	350	350	350	350	350
	Min. ailse width for 90° stacking with forks	mm	A1	6470	6475	6475	6665	6735	7945	8370	8770	7160	7770	8770	7160
	Turning radius	mm	R1	4180	4180	4180	4360	4360	4360	4785	5175	4785	4785	5175	4785
	Internal turning radius	mm	R2	75	75	75	125	125	125	420	600	420	420	600	420
OTHERS	Operating pressure for hydraulics	MPa		17,0	17,5	18,0	19,0	16,5	12,5	15,0	17,0	17,0	17,5	18,0	19,0
	Hydraulic oil tank, capacity	l		220	220	220	220	220	220	220	220	220	220	220	220
	Fuel tank, capacity	l		170	170	170	170	170	170	170	170	170	170	170	170
	AdBlue tank, capacity	l		15	15	15	15	15	15	15	15	15	15	15	15

Performance.

PERFORMANCE, VOLVO TAD551/571 VE			DCG100-6T	DCG120-6T	DCG127-6T	DCG140-6T	DCG150-6T	DCG100-12T	DCG120-12T	DCG150-12T	DCG160-6T	DCG160-9T	DCG160-12T	DCG180-6T
Lifting speed	Unloaded (m/s)		0.45	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
	At 80 % of rated load (m/s)		0.40	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Lowering speed	Unloaded (m/s)		0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	At rated load (m/s)		0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Travelling speed,	Unloaded (km/h)		29	29	29	29	29	29	29	29	29	29	29	29
	At rated load (km/h)		27	27	27	27	27	27	27	26	26	26	26	26
Gradeability, max.	Unloaded (%)		103	96	90	88	65	72	66	56	68	58	54	59
	At rated load (%)		48	42	38	36	32	40	35	30	31	29	28	27
Gradeability, at 2 km/h	Unloaded (%)		83	77	69	68	53	58	54	47	56	49	46	49
	At rated load (%)		41	37	34	32	28	35	31	27	28	26	25	25
Drawbar pull	Max. (kN)		108	108	104	104	104	104	104	104	104	104	104	104
Noise level, inside	LpAZ*, Essential cabin (dB(A))		76	76	76	76	76	76	76	76	76	76	76	76
	LpAZ*, Essential cabin OHG (dB(A))									-	-	-	-	-
Noise level, outside	LWA** (dB(A))		108	108	108	108	108	108	108	108	108	108	108	108

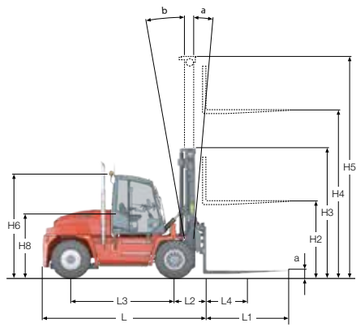
PERFORMANCE, VOLVO TAD550/570 VE			DCG100-6T	DCG120-6T	DCG127-6T	DCG140-6T	DCG150-6T	DCG100-12T	DCG120-12T	DCG150-12T	DCG160-6T	DCG160-9T	DCG160-12T	DCG180-6T
Lifting speed	Unloaded (m/s)		0.45	0.35	0.35	0.35	0.35	0.35	0.35	–	–	–	–	–
	At 80 % of rated load (m/s)		0.40	0.30	0.30	0.30	0.30	0.30	0.30	–	–	–	–	–
Lowering speed	Unloaded (m/s)		0.40	0.40	0.40	0.40	0.40	0.40	0.40	–	–	–	–	–
	At rated load (m/s)		0.40	0.40	0.40	0.40	0.40	0.40	0.40	–	–	–	–	–
Travelling speed,	Unloaded (km/h)		28	28	28	28	28	28	28	–	–	–	–	–
	At rated load (km/h)		27	27	27	27	27	27	27	–	–	–	–	–
Gradeability, max.	Unloaded (%)		79	73	69	67	50	55	50	–	–	–	–	–
	At rated load (%)		41	36	33	31	27	34	30	–	–	–	–	–
Gradeability, at 2 km/h	Unloaded (%)		63	59	53	52	41	44	41	–	–	–	–	–
	At rated load (%)		34	30	28	27	23	29	25	–	–	–	–	–
Drawbar pull	Max. (kN)		94	94	90	90	90	90	90	–	–	–	–	–
Noise level, inside	LpAZ*, Essential cabin (dB(A))		76	76	76	76	76	76	76	–	–	–	–	–
	LpAZ*, Essential cabin OHG (dB(A))		-	-	-	-	-	-	-	–	–	–	–	–
Noise level, outside	LWA** (dB(A))		107	107	107	107	107	107	107	–	–	–	–	–

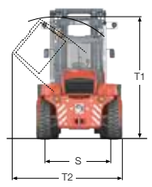
Drivetrain.

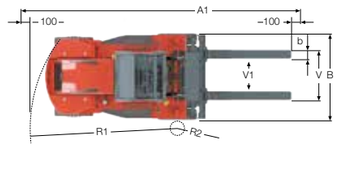
			Volvo TAD570 VE ZF 3WG161 (105 kW)	Volvo TAD571 VE ZF 3WG161 (129 kW)	Volvo TAD550 VE ZF 3WG131 (105 kW)	Volvo TAD551 VE ZF 3WG161 (129 kW)
ENGINE	Manufacturer's type designation		Volvo TAD570VE (Turbo-Intercooler)	Volvo TAD571VE (Turbo-Intercooler)	Volvo TAD550VE (Turbo-Intercooler)	Volvo TAD551VE (Turbo-Intercooler)
	Fuel, type of engine		Diesel, 4-stroke	Diesel, 4-stroke	Diesel, 4-stroke	Diesel, 4-stroke
	Rating ISO 3046 / at revs	kW / rpm	105 / 2300	129 / 2300	105 / 2200	129 / 2200
	Peak torque ISO 3046 / at revs	Nm / rpm	710 / 1000-1400	810 / 1100-1500	710 / 1400	810 / 1400
	Number of cylinders / displacement	cm^3	4 / 5130	4 / 5130	4 / 5130	4 / 5130
	Fuel consumption, normal driving	l/h	6-8	7-9	6-8	7-9
	AdBlue consumption, normal driving	% of diesel	4-6	4-6	N/A	N/A
	Emission standard		Stage IV / Tier 4 Final	Stage IV / Tier 4 Final	Stage 3A	Stage 3A
GEARBOX & MISC.	Manufacturer's type designation		ZF 3WG161	ZF 3WG161	ZF 3WG131	ZF 3WG161
	Clutch, type		Torque converter	Torque converter	Torque converter	Torque converter
	Gearbox, type		Hydrodynamic Powershift	Hydrodynamic Powershift	Hydrodynamic Powershift	Hydrodynamic Powershift
	Numbers of gears, forward / reverse		3 / 3	3 / 3	3 / 3	3 / 3
	Alternator, type / power	W	AC / 3080	AC / 3080	AC / 3080	AC / 3080
	Starting battery, voltage / capacity	V / Ah	2×12 / 150	2×12 / 150	2×12 / 150	2×12 / 150
	Driving axle, manufacturer / type		Kessler D61/D81 / Differential and hub reduction	Kessler D61/D81 / Differential and hub reduction	Kessler D61/D81 / Differential and hub reduction	Kessler D61/D81 / Differential and hub reduction

Lifting data.

	Lift height	Mast height		Free lift	Mast height		Free lift
	H4	H3 min	H5 max	H2	H3 min	H5 max	H2
		DCG90-140*			DCG100-180**		
DUPLEX STANDARD, CLEAR VIEW	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	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	4500	2950	5950	1500	3130	6190	1500
	5000	3117	6450	1667	3297	6690	1667
	5500	3283	6950	1833	3463	7190	1833
	6000	3450	7450	2000	3630	7690	2000
	6500	3617	7950	2167	3797	8190	2167
	7000	3783	8450	2333	3963	8690	2333







Standard.

Cabin
- Std seat with 2-p belt mechanical suspension.
- Adjustable height length and tilt backrest.
- Armrest adjustable for height and reach, on right side
- Steering wheel with spinner
- Tiltable steering wheel column
- Levers installed in steering column (shifting, direction indicators)
- Brake pedal
- Electronic accelerator pedal

For closed cabin
- Window panes on roof, rear, and front (tinted and tempered)
- Simple 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 5/10.

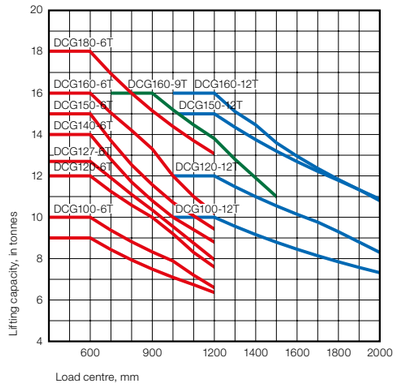
Body
- Tiltable cab
- Steps with anti-slip protection.
- Lifting eyes in mast

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

Wheels
- DCG90-160T: 12,00x20/20PR
- DCG180T: 12,00x20/20PR HD

Colour
- 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 catalougue (electronic).



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