

DEDICATED

for empty and semi-laden
container handling



The Kalmar DRG100-140
Reachstacker.



Loaded with

PRODUCTIVE

versatility

The Kalmar DRG100-140. With this reachstacker for empty and semi-laden container handling you get it all. The ability to handle all sorts of containers, flat racks and slinged loads up to 14 tonnes precisely and safely.

Ready to handle your empty containers.

The Kalmar DRG100-140 has the capacity to handle all types of containers (standard ISO, reefers, tanks, specials and flat racks) and slinged loads up to 14 tonnes and can stack up to 8 containers high and three containers deep.

Below are the container types you will be able to handle with a Kalmar DRG 100-140:

- Standard ISO containers 20 ft – 40 ft and pick-up in 40 ft position for 45 ft – 56 ft sizes
- Standard ISO heights 4 ft – 9 ft 6 in or special 10 ft 6 in
- Reefer containers 20 ft – 40 ft (45 ft pick-up in 40 ft position)
- Tank containers 20 ft – 30 ft
- Flat racks 20 ft – 40 ft
- Slinged load in 4 lift hooks.

Just rotate and lift.

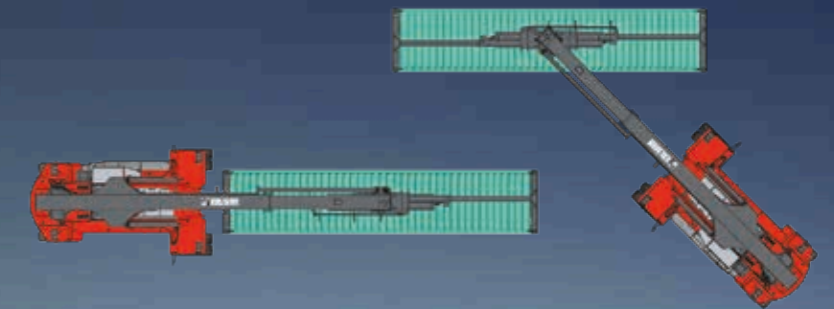
A reachstacker like the Kalmar DRG100-140 adds another dimension to empty container handling. Containers can be transported at full width, turned 45° or lengthwise at 90°, making it possible to deliver “end-on” into and through low workshop doors, port sheds and other tight openings. Operators don’t have to pick up containers right-angled, and can increase efficiency and handling speed during yard stacking, loading of road trucks or container repairs.

The Kalmar DRG100-140 is the only reachstacker for empty and semi-laden container handling on the market that can offer all of these smart functions.

Fully equipped – safe and sound.

Our G-Generation reachstackers are safe machines and the Kalmar DRG100-140 is no exception. Extremely stable – it’s the only reachstacker on the market with the high-capacity 5.4 m wheelbase. It has the best combined lift capacity in rows 1-2-3, a spreader with the biggest side shift and 4 extra lift hooks, front and reverse tilts, twistlock status indicators, dual rotation motors and brakes, and a complete LED lamp kit as a standard.

The Kalmar DRG100-140 offers full flexibility with full rotation, large sideshift and tilt to allow you to both transport and perform services, maintenance, repairs and cleaning of containers and tanks with maximum efficiency. Low and narrow workshop doors don’t present a problem for our reachstackers. Just turn the container lengthwise and drive inside.



Productive and **EFFICIENT**

Delivering every day.

Productivity & Performance, Best Lifetime Value, Safety & Ergonomics, Environmentally-Friendly are guiding stars at Kalmar, and have made our reachstackers the preferred choice in more than 160 countries.



10,000 good reasons to choose Kalmar.

The Kalmar DRG100-140 is built on our latest technology platform, G-Generation, which is based on our experience from our more than 10,000 reachstackers sold. Our goal was to provide the most outstanding operator experience, the highest level of productivity and the best lifetime value. An ergonomic cabin, integrated components, an electrical control system, a high degree of automation and intuitive, digital interfaces are just a few of the standard features.

Make every move count.

When choosing the right machine for you, consider the full value. Kalmar reachstackers excel at reducing your total cost of ownership. With well-proven quality materials, durable components and sturdy design, the Kalmar DRG100-140 is a profitable choice. Extremely reliable, it optimises uptime and minimises operational and maintenance costs on a daily basis – but also in regards to lifetime value.

We are fully prepared to provide rapid support for the entire life cycle of your machine, before it leaves the factory floor. With Kalmar you also have the industry's most extensive support and after-sales network at your disposal. Our global presence and local service helps to ensure swift response for everything from spare parts and product support teams down to individual, local service technicians.

After all, what good is even the best equipment on the market if it's left standing still? Our aim is to protect your investment, which is why our top priority is to minimise the costs of unnecessary downtime. This also helps explain why Kalmar reachstackers consistently maintain one of the highest resale values.

Save time and money.

The Kalmar DRG100-140 is equipped with modern, high-tech and fuel-efficient Volvo diesel engines, EU3 / Tier 3, EU4 / Tier 4F or EU5 emission standards. The 6-inline engines give you all the power and torque you need for empty and semi-laden container handling but with a lower fuel cost. Performance needs can change by the day – or even by the hour. Kalmar offers three performance modes from which to choose, based on your needs for productivity, profitability and performance.

Power Mode: when maximum productivity is of the essence. With full engine speeds you will be able to move quickly about the yard, lift and lower at full speed, without compromising on safety.

Normal Mode: for normal productivity and yard operations, you can expect up to 15% lower fuel consumption without compromising on productivity.

Save up to
15%
on fuel consumption

Economy Mode: for off-peak or night time operations when productivity is not essential or lower noise levels are required, you can expect up to 25% lower fuel consumption.

Save up to
25%
on fuel consumption

The Kalmar DRG100-140 also offers longer service and maintenance intervals, which cuts costs and increases uptime. The machine is easy to access for service. And Kalmar's extensive, swift global service and after-sales network makes sure your uptime is maximised.

Service intervals for DRG reachstackers.

Description	Check (hours)	Filter (hours)	Oil (hours)
First Machine service	500		
Working hydraulics (return line – no oil sample)		1 000	4 000
Working hydraulics (return line – with oil sample)		1 000	4 000 – 10 000
Working hydraulics (fine filter longlife)		500	
Engine (no oil sample) – Volvo EU4/EPA 4-Final		500	1 000
Engine (no oil sample) - Volvo EU3A/EPA 3		500	500
Transmission		1 000	1 000
Drive axle ¹⁾			2 000
Spreader rotation hydraulic motor ¹⁾			2 000

1) First oil change & filter change at 500 h – then after every 2 000 h



BOOSTING

the core of efficiency



Reachstackers are only as good as their operators. So to make sure they can operate on a high level, we handle them with care. The EGO cabin of the Kalmar DRG100-140 offers an outstanding working environment and driving experience. The result is less downtime, fewer cargo damages and more alert, productive and healthy operators.

Experience the best.

The EGO cabin is the result of our insight into operating conditions across the world, years of development and thousands of tests. It provides a seamless operating environment that minimises fatigue and enables optimal load handling.

Endless visibility.

The open cabin design features slim profiles, no A-pillars and a wide-curved, corner-wrapped windscreen. With a near absence of blind spots, visibility is optimised at all angles. The windscreen is equipped with unique high-capacity double wipers, and the roof with a single wiper. These dry and clean the surface to ensure visibility in wet and dirty conditions. The best you can get!

Stay in control naturally.

The main operation work console, switches and indicators for data display and machine control systems are logically organised and well placed within sight and reach.

Fully equipped with electronic tools and an easy-to-use Kalmar Information Colour Display with intuitive Human-Machine Interface (HMI). All check-ups are easy to perform – you can see, hear, touch and react to inputs on the machine's performance without losing focus on your load. The intuitive Head Up display allows you to monitor loading and unloading as symbols shift from green to yellow to red, showing the twistlock and support jack status.

Superior ergonomic design.

The patented side-tilting steering wheel can be angled to the side or moved forwards slightly to avoid obstruction and increase comfort. It also provides better control of loads and allows new steering possibilities.

The patented with a built-in directional shift knob (forward/ reverse shifter) stays firmly secured in position for smooth, safe directional changes while optimising lifting capacity and ergonomically reducing arm fatigue.

The fully integrated, adjustable multi-seat provides the best possible sitting posture for long shifts and demanding operations. The ergonomically designed comfort pedals are floor-based to minimise strain on the foot while enabling hard driving.

Our standard Climate Package is the most powerful on the market. It has the highest capacity heater, cooling and filtered airflow for super interior comfort.

Precise lifting of long container end-on - 40 ft



Superior end-on lifting capacity - 20 ft



A range of OPTIONS



Kalmar has a range of options that make operating your equipment safer:



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. You can also add a Reverse Warning System, with both camera and rear ultrasonic sensors, to further increase your level of safety.



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

- Flashing LED brake lights when reversing
- Additional LED lights on the boom (front or middle), spreader, front mudguards, cabin roof or rear.



Fire Suppression System. To protect your operator and machine from fire you can fit a FSS to your machine. The system utilises multiple spray nozzles that release a high-pressure water mist where the fire has been detected from a re-chargeable water tank. This can be activated manually or automatically through an in-cabin temperature sensor.



Alcolock. To ensure that your driver is at their best when operating your equipment, you can install an Alcolock system. This system makes sure that the driver meets alcohol blood level standards before being able to start the machine, much like a breathalyser.



Kalmar has a range of options that make operating your equipment more productive:



Tyre pressure monitoring. 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. Active care of your tyres can result in a 10-40% increase in tyre life and up to a 10% decrease in fuel consumption.



Start/Stop function. An optional start/stop function can be added to automatically activate and deactivate the machine. In addition to reducing unnecessary emissions and extending the lifespan of components, this makes it possible to achieve up to 10% in fuel savings.



Various speed limiters. Allows you to program and set various speed limits to reduce fuel consumption, improve operational safety, cater for area speed restrictions, lift heights and loads to be transported. These settings cannot be exceeded by your drivers.

Three high-productive models:

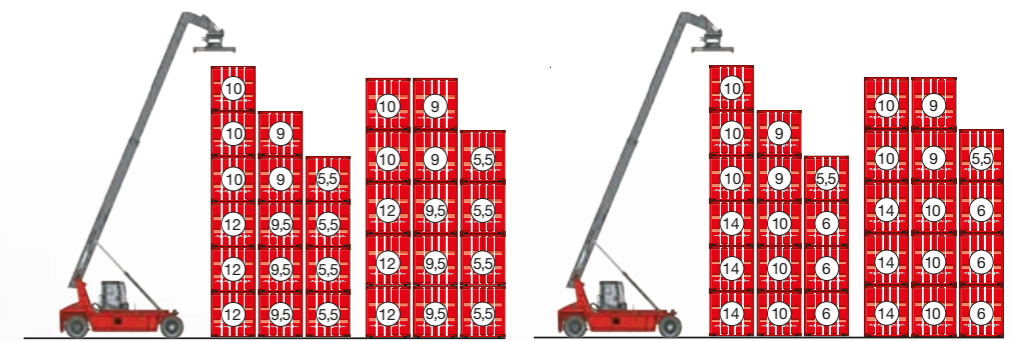
The DRG100-S6 and the DRG120-S6 stack 6-high in the first row with container loads up to 10 and 12 tonnes.

The DRG100-S8 stacks 8-high and up to 10 tonnes in the first row.



DRG100-54S6

DRG100-54S8



DRG120-54S6

DRG140-54S6



High stability with long wheelbase.

EASY

to maintain and monitor

Performing daily inspections and routine servicing is quick and convenient with all check points easily and safely accessible. The electrical cabinet is convenient to access and when the hatch covers are raised, the hydraulic filters, servicing points and the entire driveline can be reached from one location. With industry-leading service intervals, your machine will spend less time being maintained and regular service tasks can be done quicker and more efficiently, all helping to increase the overall availability of your machine.

Kalmar Care, making sure your business never stops.

We offer a range of flexible service contracts, which are designed to help you improve your operational efficiency, productivity and financial predictability. You just need to choose what is right for you and your day-to-day operations.

Kalmar Insight. Turning data into actionable, impactful insights.

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. This information is then accessed through an easy to use interface that is available on mobile, tablet or more traditional screens.

You can review your entire fleet activities, schedule maintenance 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, and can be retrofitted into existing Kalmar equipment or those built by other manufacturers.



Financing options.

You may choose to buy your new reachstacker outright or consider leasing or renting your equipment. Kalmar offers a range of leasing and renting options that can 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 required by your fleet. You just need to choose which leasing package and level of service and maintenance support is right for your business. Kalmar can also help you with trading-in your old equipment.

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



Kalmar Training.

Our training centre offers a range of courses for both your technicians and operators.

Technicians will be given the knowledge that they need to be able to maintain your new equipment in top condition. Courses are a mix of theory and hands on experience and can be held at Kalmar or at your site.

Operators will be shown how to get more from their equipment. They will be shown how to improve the efficiency of their driving, what needs to be checked daily before operating and how to get the most out of their new reachstacker.



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, with Kalmar Parts Care you can do just that. Kalmar Parts Care can make sure that critical spare parts are always on hand so your equipment downtime is kept at a minimum. Each Kalmar Parts Care plan is based on your individual needs, so talk to us today and see how we can lift your parts availability, while reducing your inventory costs.

*Installation costs and/or an annual subscription fee may apply.

STANDARD

Kalmar DRG100-140, S6-S8, 10-14 tonnes

Norms, standards and regulations

- Machinery Directive 2006/42/EC
- Safety Variable Reach Trucks
- Safety Low & High Lift Trucks ANSI/ B56.1
- Stability Variable Reach Trucks
- CE-marking for trucks within EU/EEA
- ANSI/ITSDF-marking for North America trucks

Chassis

- Strong and durable heavy-duty chassis
- Safe access steps, platform & hand rails (LHS)
- Long bottom access step
- Lifting eyes and anchor points (front & rear)
- Good rear end visibility of the truck
- Towing pin (rear - incasted)

Body

- Steps with anti-slip protection
- Rear view mirrors - rear on front mudguards
- Strong and protective mudguards (front & rear)
- Noise insulation kit for the complete truck

Steer Axle (rear)

- Kalmar steer axle mounted dual pivot bearings
- Orbitrol power steering with double acting cylinder

Drive Axle (front)

- Kessler planetary axle with differential drive
- Wide axle for high side stability (4150 mm)
- Oil-cooled Wet Disc Brakes (WDB)
- High pressure filter (10 mμ) for the brakes
- Brake tank (100 lit), cooling & breather filter

Wheels (tyres & rims)

- Drive tyres 14.00x24"/PR24 (4x)
- Steer tyres 14.00x24"/PR24 (2x)

Drive train (CAN-bus)

- Emission approval EU3 / Tier 3, EU4 / Tier 4 or EU5*
- 6-cylinder diesel engines with pre-heater
- High power & torque with low fuel consumption
- Engine monitoring and protection system
- Fully automatic transmission
DANA LTE-14400 (4+4/Lockup)
- Transmission monitoring and reverse protection
- Declutch function activated by pedal switch
- Heavy-duty radiators for engine + transmission

Load-Sensing Hydraulics

- Load-sensing variable piston pumps (3x)
- Pumps for boom, spreader, brakes & steering
- Vane pumps for brake & oil cooling (2x)
- Return filters for the work hydraulics (2x/10 mμ)
- Hydraulic longlife fine filter with by-pass (5 mμ)
- Servo filter for the work hydraulics (10 mμ)
- Pressure filter for the brakes (10 mμ)
- Regeneration high-speed lifting & extension
- Boom end-damping (in-out/up-down/20-40°)
- Power steer, power brakes & ORFS-couplings
- Hydraulic tank (425 lit), cooling & breather filter
- Separated dual oil tanks

Lifting boom

- Strong, durable box-type boom with guide pads
- Duplex 2-stage S6
- Triplex 3-stage S8
- Long boom nose for flat racks (H4 = 600 mm)
- Boom with 2 lift cylinders & 1 extension cylinder

Attachment

- Top lift 10-14 tonnes, hydraulic extension 20°-40°
- 4 floating twistlocks & indication LED lamps
- Safety locking, alignment pins & sensors (4x)
- Large sideshift of ±1000 mm
- Rotation +195°-105 deg (2 motors & 2 brakes)
- Mechanical Pile Slope MPS ±5 deg
- Lift hooks for slings on end beams (4x)
- Tilt lock, container at 90 deg (max 5 km/h)

Electrical system 24V

- Battery box 2x12V & main power switch
- Electric service box on chassis (LHS)
- 2 working LED-lights on attachment
- 2 working LED-lights on boom
- 2 working LED-lights on front edge cabin
- 2 rear LED-lights on fenders (when reversing)
- 2 head light LED on front fenders
- 2 position LED-lights on each side
- 2 tail LED-lights / brake LED-lights
- 4 LED-blinkers (front-rear/left-right)
- 2 flashing brake LED-lights (when reversing)
- 1 rotating warning LED-beacon
- 1 acoustic signal / reverse alarm (in reverse)

Cabin

Structure

- Spacious, modern cabin with best ergonomy
- Large windows, good visibility, in all directions
- Manual moveable cabin (stroke 1750 mm)
- Instep handle (left side)
- Sliding window on both sides
- Doors with air damper and key lock (L + R)
- Tinted laminated windows

Comfort

- Seat Kalmar, mech. spring, high back
- Adjustable armrest (RHS) & 2-point safety belt
- Inside rear view mirror (right side)
- Interior lights with fade away function
- 2x24V el. connection in door columns (L + R)
- Fully adjustable steering wheel incl tilt function
- Fully adjustable colour display
- Electric adjustable operational console with joystick, operational buttons & armrest (RHS)
- Power steering wheel with steer knob
- Electric horn
- LED background light for buttons & switches

Controls

- Joystick for boom, spreader & forward / reverse
- Auto rev-up accelerator at lifting/extension
- Electric accelerator pedal (hanging)
- Double brake pedals (L + R)
- Button for electronic hand brake (on/off)
- Automatic gear shifting (P1)
- Only first gear activated (P2)
- Only second gear activated (P3)
- Safety override for hydraulic functions (by code)
- Multi-function lever LHS (horn, gear/direction switch, high/low beam)
- Warning - hand brake (on/off) leaving seat
- Hour meter

Climate

- ECC, electronic climate control (heater, ventilator and filter)
- Air-condition incl. fresh air and recirculation filter
- Wipers/washers on front, rear and roof windows
- Interval wiper functions on front, rear and roof
- Tinted windows

Information systems

- Colour display & automatic fault analysis
- Menu control with toggle wheel & push buttons
- Electronic safety, overload, scale & synchronized lift
- LLLMI Longitudinal Load Moment Indicator
- LLLMC Longitudinal Load Moment Control

ECO Drive Modes (EDM):

- Power mode
- Normal mode
- Economy mode

Operator menu:

- System voltage
- Actual gear
- Engine rpm
- Travelling speed (km/h or m/h)
- Hydraulic oil temperature
- Transmission oil temperature
- Engine oil pressure & coolant level
- Engine oil level)
- Clock and date
- Load & Load distance (LC)
- Boom extension & Boom angle
- Operating time (hours)
- Service time indicator (hours)
- Boom angle and boom extension
- Electronic weight scale functions
- Status of heating system & AC system
- Fuel level (diesel and optional AdBlue)
- Estimated operating time before empty tank (hour/ min)
- Service indicator
- Container counter with reset function
- Trip computer / statistics

Pop-up menu:

- Overload warning
- Overload warning steering axle (high or low)

Head-Up display for twistlock indication:

- LED indicators for alignment & twistlocks

Various warning lights & signals:

- Charging battery
- Low brake pressure
- Failure indicator
- Safety system disconnected
- High engine coolant temperature
- Low engine coolant level
- Low engine oil pressure
- Preheating engine
- Transmission oil temperature
- Low fuel level
- Hydraulic oil temperature

Indicator lamps:

- High beam
- Direction indicator
- Parking brake

Fleet management:

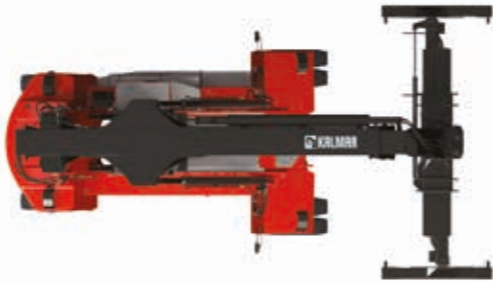
- Equipped with telemetric hardware for Kalmar Insight

Colour

- Cabin: Iron-Grey RAL 7011
- Chassis, tanks & mudguards: Red RAL 3000
- Boom, attachment & axles: Black RAL 7021
- Rims: Iron-Grey RAL 7011

Documentation and decals

- Load chart diagram inside cabin
- Machine data sign on chassis incl. load chart
- Warning, tyre pressure & oil pressure stickers
- Information & joystick stickers
- Fuse diagram
- Instruction manual
- Maintenance manual
- Spare parts catalogue



OPTIONS

Kalmar DRG100-140, S6-S8, 10-14 tonnes

Chassis

- DRG100-54S6 (L3=5400 mm / 6-high 8'6")
- DRG120-54S6 (L3=5400 mm / 6-high 8'6")
- DRG100-54S8 (L3=5400 mm / 8-high 8'6")
- DRG140-54S6 (L3=5400 mm / 6-high 8'6")

Cabin

Structure

- Hydraulic tilting cabin (stroke 0-10 degrees)
- Step for roof access

Comfort

- Seat with Air-cushion, heating & 3-p belt
- Head rest for the seat
- Armrest with adjustment (LHS)
- Horizontal dampening/suspension of seat
- Extra trainer seat incl 2-p safety belt (LHS)
- Bracket for terminal and monitor (RHS)
- Writing pad, A4 paper box and reading lamp (RHS)

Controls

- Lever steering incl switch for forward/reverse
- Mini-wheel steering incl switch for forward/reverse
- Essential joystick - Elobau
- G-Generation joystick - EGO
- F-Generation joystick - Cobra

Climate

- Sun visor front window
- Sun visor roof window
- Sun visor rear window
- Microfilter in additional to std filter
- AC/ECC switched off when door is open
- Postheating

Drive train

- Volvo TAD-851-VE (EU3A / Tier 3, 185 kW, 1160 Nm)
+ DANA TE-14400 (4+4 gears / lockup)
- Volvo TAD-871-VE (EU4 / Tier 4, 185 kW, 1160 Nm)
+ DANA TE-14400 (4+4 gears / lockup)
- Volvo TAD-881-VE (EU5, 185 kW, 1160 Nm)
+ DANA TE-14400 (4+4 gears / lockup)
- Start/stop function to save fuel
- Automatic engine and ignition stop at idle
- Precleaner air intake incl raised air intake
- Speed limitation
- Wheel nut protection on steer tyres

Hydraulics

- High pressure filter

Body

- Anti slip protection on fenders and tanks
- Mud flaps (front or/and rear)
- External rear view mirror 2/pc
- Long bottom access step (on right hand side)

Electrical system 24V

- Radio with CD/MP3
- 2x24V + 12V/5V USB sockets in door columns (L+R)
- 2x24V + 2x12V sockets in door columns (L+R)
- Electric air pressure horn
- Height limitation system for lifting boom
- Load center limitation for lifting boom
- Speed limitation, please specify km/h
- Container lights, LED 4x, on front mudguards
- Extra working light, LED 2x, on spreader
- Extra working light, LED 2x, on boom middle
- Extra working light, LED 4x, on boom front
- Electric heated mirrors, front fender/std pos
- Electric heated & adjustable mirrors, front fenders/std pos

Wheels

- Spare wheel & rim 14.00x24"/PR24

Colour

- Other colour than std, chassis
- Reinforced anti-corrosion protection

Documentation and decals

- Extra set of documentation
- Workshop manual
- Volvo workshop manual
- Load chart lbs/inch in cab & sign "no riders"
- Documentation on cd or memory stick

Additional equipment

- Camera with monitor in cab direction rearward (6-7 m)
- Reverse warning system, incl. 4x sensors, camera & monitor
- Tyre pressure monitoring system (Bluetooth)
- Diesel powered cabin heater 5 kW
- Alcolook Draeger in cabin
- Automatic fire suppression system (Dafo)
- Fire extinguisher 5-6 kilos, powder
- Tool kit
- Lockable fuel cap
- Cabin heater incl 220V outlet
- Engine heater incl. cab heater
- Engine/hydraulic oil heater incl cab heater
- Central greasing base machine
- Central greasing spreader
- Filter kit 2000 hrs
- Soft landing function with ultrasonic sensor

Fleet Management

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

Attachment (toplift)

- Tilt function ±5 deg (fwd/rev), incl tilt lock & speed limit 5 km/h
- Rotations stop spreader ±25 deg + override switch
- Automatic extension 20°-40° incl 30° stop

Training

- Contact Kalmar Training Center for training programs
- Working ECO driving

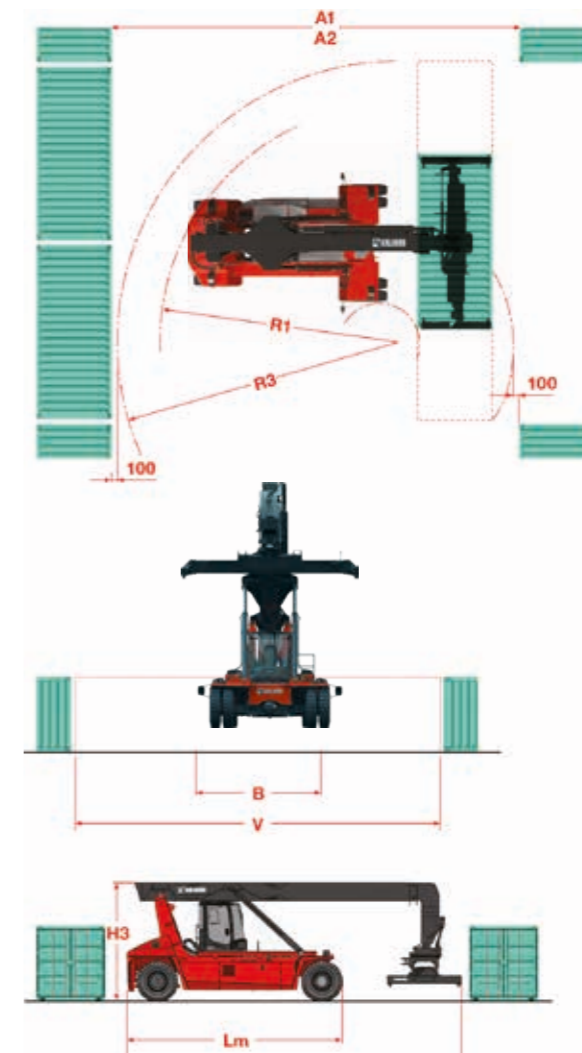


TECHNICAL INFORMATION

1 Truck Model				DRG100-54S6	DRG100-54S8	DRG120-54S6	DRG140-54S6	
2 Stacking model and height								
MAIN DATA	3	Type of handling		Empty and semi laden container handling		Empty and semi laden container handling		
	4	Lift capacity, row 1-2-3		10 - 9 - 5,5	10 - 8 - 4,5	12 - 9,5 - 5,5	14 - 10 - 6	
	5	Load centre, from front face of tyres, row 1-2-3	Q1 - Q2 - Q3	tonnes	2690 - 3840 - 6340	2690 - 3840 - 6340	2690 - 3840 - 6340	2690 - 3840 - 6340
	6	Stacking capacity in container row 1-2-3 of 8'6" / 9'6"	L4 - L5 - L6	(mm)	6/5 - 5/5 - 4/4	8/7 - 7/6 - 6/5	6/5 - 5/5 - 4/4	6/5 - 5/5 - 4/4
	7	Wheelbase	L3	(mm)	5400		5400	
	8	Service weight, standard truck		(kgs)	39000	40800	39200	40400
	9	Axle load, front at load centre L4, unloaded - loaded		(kgs)	22300 - 38600	23900 - 40200	22600 - 42200	22600 - 45400
WEIGHTS	10	Axle load, front at load centre L5, unloaded - loaded		(kgs)	24100 - 40700	25500 - 40200	24400 - 41900	24400 - 42800
	11	Axle load, rear at load centre L4, unloaded - loaded		(kgs)	16700 - 10400	16900 - 10600	16600 - 9000	17800 - 9000
	12	Axle load, rear at load centre L5, unloaded - loaded		(kgs)	14900 - 7300	15300 - 8600	14800 - 6800	16000 - 7600
	13	Tyres, dimension, PLY rating, star rating (1)			14" x 24", PR28, E4		14" x 24", PR28, E4	
WHEELS	14	Rim dimension, front - rear			10" x 24"		10" x 24"	
	15	Tyre pressure, front - rear		(MPa)	1,0 - 1,0		1,0 - 1,0	
	16	Boom type - cylinder design						
DIMENSIONS	17	Boom angle, min - max	alfa-beta	(deg)	0 - 67,5	0 - 74,8	0 - 67,5	0 - 67,5
	18	Boom height, min - max	H3 - H5	(mm)	3900 - 18700	4050 - 24150	3900 - 18700	3900 - 18700
	19	Chassis height - top of boom fixation, max	H2	(mm)	3650		3650	
	20	Lift height, min-max in twistlocks, row 1	H4	(mm)	600 - 16200	1100 - 21150	600 - 16200	600 - 16200
	21	Boom reach stroke		(mm)	7200	12200	7200	7200
	22	Truck seat height	H8	(mm)	2200		2200	
	23	Overall truck length with boom	L	(deg)	11200		11200	
	24	Truck width over drive axle	B	(mm)	4150		4150	
	25	Spreader sideshift	V1	(mm)	±1000 (2000)		±1000 (2000)	
	26	Spreader rotation, CW / CCW		(deg)	+195/-105		+195/-105	
	27	Spreader side tilt angle / tilt type		(deg)	±3,5 / MPS		±3,5 / MPS	
	28	Ground clearance		(mm)	240		240	
	29	Track width (front - rear)	S1 - S2	(mm)	3280 - 2600		3280 - 2600	
	30	Aisle width with 20'-40' container	A1 - A2	(mm)	11200 - 14200		11200 - 14200	
	31	Turning radius, outer with 20'-40' container	R1 - R3	(mm)	7000 - 8600		7000 - 8600	
POWERTRAIN	32	Traveling speed, fw unloaded - rated load / rw unloaded - rated load, max		(km/h)	30 - 30 / 30 - 30		30 - 30 / 30 - 30	
	33	Lifting speed, unloaded - at 70% of rated load - at rated load	L4	(m/s)	0,46 - 0,41 - 0,33		0,46 - 0,41 - 0,33	
	34	Lowering speed, unloaded - at 70% of rated load - at rated load	L4	(m/s)	0,74 - 0,74 - 0,55		0,74 - 0,74 - 0,55	
	35	Drawbar pull / towing capacity, max		(kN)	130		130	
OTHER	36	Fuel tank volume		(l)	525		525	
	37	AdBlue tank volume		(l)	35		35	
	38	Tank volumes, working oil / brake oil		(dm3)	525 / 100		525 / 100	
	39	Working pressure boom / spreader		(MPa)	23,0 / 16,0		23,0 / 16,0	
	40	Noise level LpAZ (EN12053) inside cabin, EU3 / EU4 / EU5 (2)		(dB(A))	72-75 / 68-72 / 68-70		72-75 / 68-72 / 68-70	
	41	Noise level LWAZ (EN12053) outside cabin, EU3 / EU4 / EU5 (2)		(dB(A))	107-109 / 103-108 / 105-106		107-109 / 103-108 / 105-106	
	42	Towing hook			Standard		Standard	
	43	Electronic overload, monitoring and safety system			Standard		Standard	

DRIVELINES

Truck Model	DRG100-140		
Engine emission approvals	EU3 / Tier 3	EU4 / Tier 4F	EU5
Engine brand and series	Volvo D8	Volvo D8	Volvo D8
Engine model	TAD-851-VE	TAD-871-VE	TAD-881-VE
Exhaust after treatment system type	No	DEF + SCR + ASC	DOC + DPF + DEF + SCR + ASC
Engine, fuel / type	Diesel / 4-stroke turbo intercooler		
Engine, layout / injection	6 cylinder inline / electric common rail direct injection		
Engine displacement (dm3)	7.7		
Max power @ engine speed (kW)	185 @ 1600-2200		
Max torque @ engine speed (Nm)	1160 @ 1100-1500		
Fuel consumption - average diesel (l/h)	7 - 14		
Fuel consumption - average AdBlue %	-	1 - 5	3 - 7
Transmission model	Dana / FLTE-14456		
Transmission gear shift type	Hydrodynamic powershift		
Transmission clutch type	Torque converter		
Transmission speed range (fwd - rev)	4 - 4		
Steering system, type - maneuvering	Servo assisted - Steering wheel		
Drive axle brand	Kessler D81, differential and hub reduction		
Service brake / cooling	Wet Disc Brakes / Oil cooling		
Alternator, power (W)	AC, 3.640 (28 x 130)		





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