

MEDIUM FORKLIFT TRUCKS 9 – 18 TONNES
TECHNICAL INFORMATION KALMAR DCE90-180, DIESEL





A truck offering many possibilities

The Kalmar 9 – 18 tonne range has a unique driving experience, visibility and handling which, together with high quality, long life and ease of service, provide the conditions for efficient working and excellent overall economy.

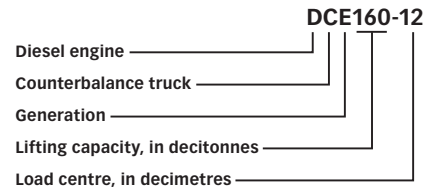
Powerful and durable power trains with electronically controlled gear units, perfectly matched with optional, environmentally friendly engines; well-balanced bodies for optimum dynamic stability and visibility.

The number of options provide an unbelievable driving experience, safety and efficiency.

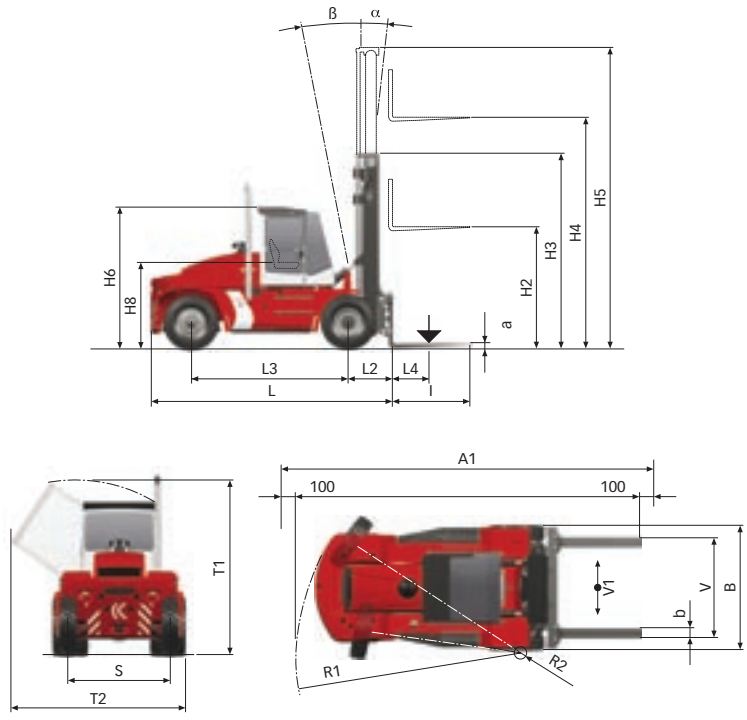
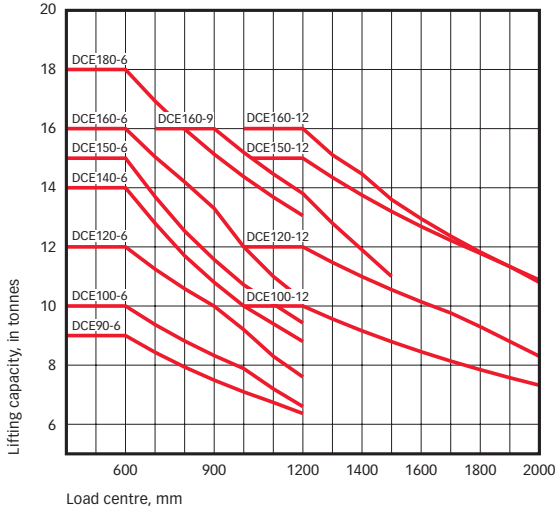
Design and technical solutions result in increased lifetime and longer service intervals; simplified service and daily inspection, and in addition to all this, a wide selection of high-quality driving environments.

Welcome to the Kalmar 9 – 18 tonne range.

Model designation



Dimensions				DCE90-6	DCE100-6	DCE120-6
Lifting	Lift capacity	Rated	kg	9000	10000	12000
		Load centre	L4 mm		600	
Dimensions	Truck	Length, without forks	L mm	4470	4720	4725
		Width	B mm		2480	
		Height, basic machine, Spirit Delta	H6 mm		2895	
		Height, basic machine, FlexCab/FlexGuard	H6 mm		2995	
		Seat height	H8 mm		1770	
		Distance between centre of front axle – front face of fork arm	L2 mm		895	900
		Wheelbase	L3 mm	2750		3000
		Track (c-c), front – rear	S mm		1840 – 1960	
		Turning radius, outer	R1 mm	3950		4180
		Turning radius, inner	R2 mm		75	
		Ground clearance, min.			330	
		Max height when tilting cab (OHG)	T1 mm		3370 (3450)	
		Max width when tilting cab (OHG)	T2 mm		3350 (3440)	
	Min. aisle width for 90° stacking with forks	A1 mm	6240	6470	6475	
	Standard duplex mast	Lifting height	H4 mm		5000	
		Mast height, min.	H3 mm		4015	
		Mast height, max.	H5 mm		6515	
		Mast tilting, forwards – backwards	$\alpha - \beta$ °		5 – 10	
		Ground clearance, min.			250	
	Forks	Width	b mm		200	
Thickness		a mm	65		70	
Length of fork arm		l mm		1200		
Width across fork arms, max.		V mm		2330		
Width across fork arms, min.		V mm		570		
Sideshift \pm at width across fork arms		V1 – V mm		440 – 1450		
Weight	Service weight		kg	15200	15600	16200
	Axle load front	Unloaded	kg	7800	8100	8300
		At rated load	kg	21700	23100	26500
	Axle load back	Unloaded	kg	7400	7500	7900
At rated load		kg	2500	2500	1900	
Wheels, brakes, steering	Wheels/tyres	Type				
		Dimensions, front – rear/ply	inch		11,00x20/16PR	
		Number of wheels, front – rear (*driven)			4* – 2	
		Pressure	MPa		0,9	
	Steering system	Type – manoeuvring				
Service brake system	Type – affected wheels					
Parking brake system	Type – affected wheels					
Misc.	Hydraulic pressure	Max.	MPa	16,0	17,5	17,5
	Hydraulic fluid volume		l	205	225	
	Fuel volume		l	140	200	



DCE90-6 to DCE180-6 models:
Full lifting capacity up to 5000 mm lift height with duplex/duplex freelift/triplex masts and integrated sideshift/fork positioning carriage.

DCE140-6	DCE150-6	DCE100-12	DCE120-12	DCE150-12	DCE160-6	DCE160-9	DCE160-12	DCE180-6
14000	15000	10000	12000	15000	16000	16000	16000	18000
600			1200		600	900	1200	600
4985	5055	5065	5315	5325	5305	5315	5575	5065
				2540				
				2920				
				3020				
				1790				
910	980	990	1000	980	990	1000	990	990
	3250			3500			3750	3250
				1855 - 1960				
	4360			4785			5175	4360
	125			420			600	125
				350				
				3395 (3475)				
				3380 (3470)				
6665	6735	7945	8370	8380	7160	8160	8770	6745
				5000				
4035				4195				
6535				6695				
				5 - 10				
				250				
200		220	250	200	220	250	220	220
80		90	100	80	90	100	90	90
1200		2400	1200	1800	2400	1200	1200	1200
2330				2360				
570		640	700	600	640	700	640	640
440 - 1450		430 - 1500	415 - 1530	440 - 1480	430 - 1500	415 - 1530	430 - 1500	430 - 1500
16900	19800	18600	19700	21400	19200	20600	22400	21100
8400	10300	10000	10100	9400	10000	9600	10500	9800
28900	32650	26700	29600	33800	33200	34200	35800	36600
8500	9500	8600	9600	12000	9200	11000	11900	11300
2000	2150	1900	2100	2600	2000	2400	2600	2500
Pneumatic								
12,00x20/20PR								
12,00x20/20PR HD								
4* - 2								
0,9								
Hydraulic servo - Steering wheel								
Oil cooled disc brakes (Wet disc brakes) - Drive wheels								
Dry, spring activated disc brake - Drive wheels								
18,5	19,0	19,5	15,0	16,5	17,5	17,5	17,5	19,0
225								
200								



Choose your own driving environment

Spirit Delta

Spirit Delta is one of the best designed driving environments available in the industry. Priority has been given to ergonomics for the driver. After a demanding shift in a Spirit Delta, the driver should be alert and attentive, resulting in improved working safety.

The overall design and all the adjustment options mean that the Spirit Delta will benefit every driver. Instruments and control layout allow the driver to see at a glance and have control over all the machine's various functions, while at the same time allowing the driver to work in an efficient and relaxed way.

Visibility has been optimised from the truck's soft design lines. Comfort with regard to noise level, climate, lighting and accessibility is at the highest level possible.

The operator of the Spirit Delta can have access to Kalmar's range of intelligent efficiency and safety options in one place.



FlexCab and FlexGuard

FlexCab is a robust alternative to the Spirit Delta. FlexCab provides good ergonomics, good visibility and also practical flexibility.

FlexCab can be quickly and simply converted from a complete cabin to an open safety cage with or without windows, side panels and heating system, depending on climate. FlexGuard is the opposite, an open safety cage that can be fitted with windows and doors even after delivery.

The robust body has been designed to provide optimal visibility. This is especially noticeable at the corner posts and roof rails, which have the smallest cross section possible for the benefit of the driver.



FlexCab



FlexGuard

The visibility is substantial and the distance between the driver's seat and the roof has generous space.

Efficient operation is ensured by control and instrument layout and the degree of comfort of the driver's seat.



A complete program of lifting equipment

Choosing lifting equipment always involves a combination of different requirements – lift height, clearance, free lift, vehicle flexibility, as well as built in functions in the vehicle.

Whatever the requirements, Kalmar has the combination that allows efficient operation

and optimum visibility conditions. The mast frame on the Kalmar 9 – 18 series have excellent visibility. Optimised frame and cross bars have been combined with well-placed hoses and hoist chains that are “invisible” during normal operation.

Kalmar can also offer numerous options to improve efficiency and safety, opti speed (increased lifting speed), lift height pre-set (going directly to the right height), vertical hold (always vertical) and chain-slack elimination.

Masts

Mast							
Lift height	Mast height		Free lift	Mast height		Free lift	
	H3 min.	H5 max.	H2	H3 min.	H5 max.	H2	
	DCE90-140*			DCE100-180**			
3000	3015	4515	–	3195	4695	–	
3250	3140	4765	–	3320	4945	–	
3500	3265	5015	–	3445	5195	–	
3750	3390	5265	–	3570	5445	–	
4000	3515	5515	–	3695	5695	–	
4250	3640	5765	–	3820	5945	–	
4500	3765	6015	–	3945	6195	–	
4750	3890	6265	–	4070	6445	–	
5000	4015	6515	–	4195	6695	–	
5250	4140	6765	–	4320	6945	–	
5500	4265	7015	–	4445	7195	–	
5750	4390	7265	–	4570	7445	–	
6000	4515	7515	–	4695	7695	–	
6250	4640	7765	–	4820	7945	–	
6500	4765	8015	–	4945	8195	–	
6750	4890	8265	–	5070	8445	–	
7000	5015	8515	–	5195	8695	–	
Duplex standard, 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
	4250	3640	5765	2125	3820	5945	2125
	4500	3765	6015	2250	3945	6195	2250
	4750	3890	6265	2375	4070	6445	2375
	5000	4015	6515	2500	4195	6695	2500
	5250	4140	6765	2625	4320	6945	2625
Duplex full free lift, clear view	5500	4265	7015	2750	4445	7195	2750
	5750	4390	7265	2875	4570	7445	2875
	6000	4515	7515	3000	4695	7695	3000
	6250	4640	7765	3125	4820	7945	3125
	6500	4765	8015	3250	4945	8195	3250
	6750	4890	8265	3375	5070	8445	3375
	7000	5015	8515	3500	5195	8695	3500
	4500	2950	5950	1500	3130	6190	1500
	4750	3033	6200	1583	3213	6440	1583
	5000	3117	6450	1667	3297	6690	1667
Triplex full free lift, clear view	5250	3200	6700	1750	3380	6940	1750
	5500	3283	6950	1833	3463	7190	1833
	5750	3367	7200	1917	3547	7440	1917
	6000	3450	7450	2000	3630	7690	2000
	6250	3533	7700	2083	3713	7940	2083
	6500	3617	7950	2167	3797	8190	2167
	6750	3700	8200	2250	3880	8440	2250
	7000	3783	8450	2333	3963	8690	2333

+25 mm on H3 and H5 on the DCE140

* DCE90-140-6

** DCE150-180-6, DCE160-9, DCE100-160-12

Carriages



Duplex standard, clear view



Fixed for manually moveable forks



Centre levelling



Fork positioning and sideshift



Sideshift



Duplex full free lift, clear view

Forks



Standard forks for manual adjustment



Fork shaft system with separate carriers for each fork



Triplex full free lift, clear view



Roller fittings for hydraulic adjustment



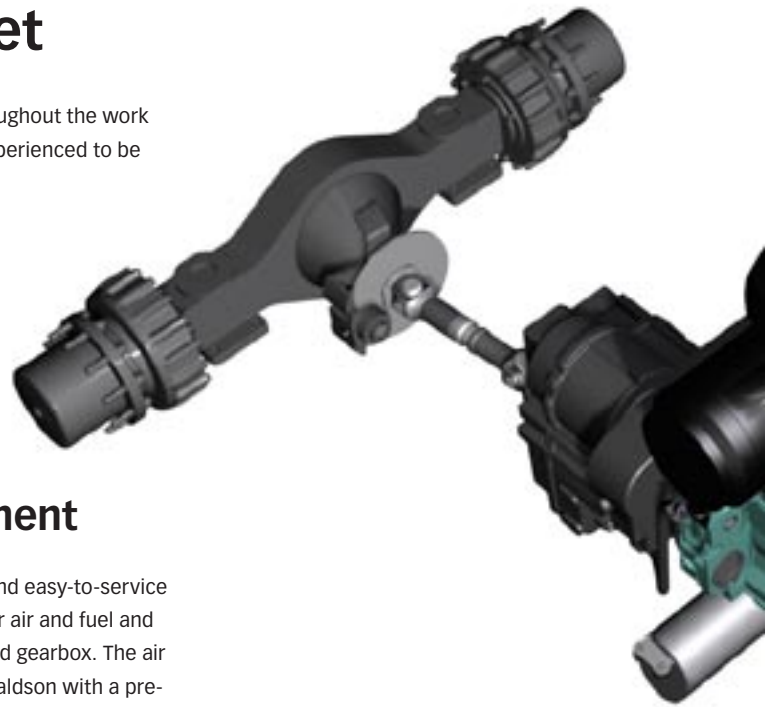
Hydraulic levelling



The most interesting power trains on the market

We have equipped the Kalmar 9 – 18 tonne range with excellent drive trains. Engine, gearbox, drive shaft and wet disc brakes – everything has been built and combined into a unit with the highest performance and durability possible. Together with the excellent dynamic stability of the 9 – 18 series, this provides a driving experience

and level of control throughout the work cycle that have to be experienced to be believed.



Low emission engines – a requirement

We can offer a number of different power trains. All engines provide high torque even at low revolutions. The engines fall well within the latest emission requirements and they also conform to the new noise power standards (previously noise pressure).

Stage 3 engines require more powerful cooling than before and the trucks come

fitted with an efficient and easy-to-service split cooling system – for air and fuel and coolant to the engine and gearbox. The air filter is a two-stage Donaldson with a pre-cleaner in stage one and a finer cellulose filter for the smallest particles in stage two. This can also be replaced by a metallic or dust particle filter as an option. The filter has a high cleaning capacity and is easy to replace.

Unique transmission gives an unbelievable experience

We are able to offer different gearboxes. The gearboxes have integrated electronic control, monitoring and intelligence. The gearboxes have built-in reversing lock and modulation, providing safe and smooth gear changing. In addition we also optimise slipping electronically before delivery to provide the best gear-changing characteristics depending on power train, wheel dimension and drive shaft.

There are three optional grades of “intelligence” to choose from: automatic gear-changing, opti drive (for precision driving with entirely independent working hydraulics) and electronic inching with controlled slipping.



Kalmar's electronic system gives the truck intelligence

Kalmar's electronic system is a fast, intelligent and stable auxiliary electronic system that makes the truck user-friendly, effective, safe and economical. Kalmar's electrical system has been thoroughly upgraded through development. The installation is more standardised and simplified using CAN-bus technology. Furthermore, updated software and electrical components were implemented to deliver a high level of flexibility, ease of maintenance and durability.



Distance since last service and hours to next service.

The Kalmar 9 – 18 tonne range is standardly equipped with a very simple and non-language-specific interface for the information on the steering wheel display. Information is provided in three areas – diagnostics, operation and alarms. The standard control system monitors the engine and gearbox and gives feedback to the operator in the display. There are plenty of options available, from ergonomic functions such as lever and mini steering wheel control, to functions for reduced fuel consumption (opti rev) or increased lifting speed (opti speed).

Drive and steering axle

The steering system is a well proven robust design with a double acting cylinder and a pendulum suspension. The strength and the durability is obvious when you look at the steer axle.

The drive axle has a robust design in order to cope with extreme stresses in tough working environments with heavy loads, high intensity operations and even towing tasks. The drive axle has a two stage reduction to ensure minimum strain on the transmission system- differential and hub reduction.

The axle is fitted with a hydraulic service brake system (Wet Disc Brakes). It is also fitted with the dry disc parking brake actuated electronically via pushbutton in display.

The service brake system is of the Wet Disc Brake type, a well-proven system comprised of a set of fixed and a set of rotating oil-cooled discs. When the brakes are applied, the discs are pressed together by hydraulic pressure from the brake pedal.

This provides an extremely effective and smooth braking system which can cope with heavy stresses over an extended period of time without any risk of overheating or fading.

The system is virtually maintenance free with almost no wear and tear and need for brake adjustments. The heat generated during the braking is transmitted via a cooling circuit which effectively uses the truck's total volume of hydraulic fluid. A special filter protects the brakes.

Power trains and performance

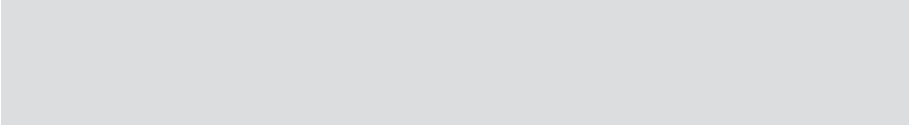
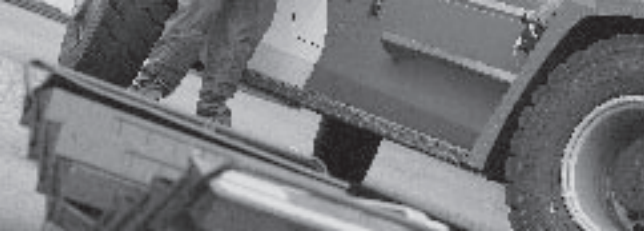
Drive trains – Volvo				Volvo TAD650VE (147kW) Dana TE13000		Volvo TAD750VE (181kW) Dana TE17000	
Drive train	Engine	Manufacturer – type designation		Volvo – TAD650VE (Turbo-Intercooler)		Volvo – TAD750VE (Turbo-Intercooler)	
		Fuel – type of engine		Diesel – 4-stroke		Diesel – 4-stroke	
		Rating ISO 3046 – at revs	kW/hp – rpm	147/200 – 2300 / 136/185 – 2000		181/246 – 2300 / 181/246 – 2000	
		Peak torque ISO 3046 – at revs	Nm – rpm	750 – 1600		1050 – 1500	
		Number of cylinders – displacement	cm ³	6 – 6057		6 – 7145	
	Fuel consumption, normal driving		l/h	8-11		8-11	
	Gearbox	Manufacturer – type designation		Dana – TE13000		Dana – TE17000	
		Clutch, type		Torque converter		Torque converter	
		Gearbox, type		Hydro-dynamic Powershift		Hydro-dynamic Powershift	
		Numbers of gears, forward – reverse		3 – 3		3 – 3	
Alternator	Type – power	W	AC – 2240		AC – 2240		
Starting battery	Voltage – capacity		V – Ah		2×12 – 140		
Driving axle	Manufacturer – type		Kessler D81 – Differential and hub reduction		Kessler D81 – Differential and hub reduction		

Volvo TAD650VE (147kW) with Dana TE13000				DCE 90-6	DCE 100-6	DCE 120-6	DCE 140-6	DCE 150-6	DCE 100-12	DCE 120-12	DCE 150-12	DCE 160-6	DCE 160-9	DCE 160-12	DCE 180-6	
Performance	Lifting speed	Unloaded	m/s	0,50	0,50	0,40	0,40	0,45	0,50	0,40	0,40	0,40	0,40	0,40	0,40	
		At rated load	m/s	0,45	0,45	0,35	0,35	0,35	0,45	0,35	0,35	0,35	0,35	0,35	0,35	
	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, forward and reverse	Unloaded	km/h	29	29	29	29	29	29	29	29	29	29	29	29	
		At rated load	km/h	28	28	27	28	28	28	28	27	27	27	27	27	
	Gradeability	Max	unloaded	%	130	121	110	93	71	79	72	63	75	67	59	65
			at rated load	%	56	52	45	39	34	43	38	32	33	32	30	30
		At 2 km/h	unloaded	%	74	71	68	60	49	53	49	44	51	46	42	45
			at rated load	%	39	37	33	28	25	31	28	24	25	24	22	22
Drawbar pull	Max	kN	121	121	121	116	116	116	116	116	116	116	116	116		
Noise	Noise level according to EN12053	LpAZ (inside) Spirit Delta	dB(A)	73	73	73	73	73	73	73	73	73	73	73	73	
		LpAZ (inside) FlexGuard	dB(A)	85	85	85	85	85	85	85	85	85	85	85	85	
		LpAZ (inside) FlexCab	dB(A)	78	78	78	78	78	78	78	78	78	78	78	78	
	Noise level according to 2000/14/EC	LWA (outside)	dB(A)	108	108	108	108	108	108	108	108	108	108	108	108	

Volvo TAD750VE (181kW) with Dana TE17000				DCE 90-6	DCE 100-6	DCE 120-6	DCE 140-6	DCE 150-6	DCE 100-12	DCE 120-12	DCE 150-12	DCE 160-6	DCE 160-9	DCE 160-12	DCE 180-6	
Performance	Lifting speed	Unloaded	m/s	–	0,50	0,40	0,40	0,45	0,50	0,40	0,40	0,40	0,40	0,40	0,40	
		At rated load	m/s	–	0,45	0,35	0,35	0,35	0,45	0,35	0,35	0,35	0,35	0,35	0,35	
	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	
		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	
	Travelling speed, forward and reverse	Unloaded	km/h	–	28	28	29	29	29	29	29	29	29	29	29	
		At rated load	km/h	–	28	28	29	28	29	28	28	28	28	28	28	
	Gradeability	Max	unloaded	%	–	>120	>120	>120	96	109	97	83	102	89	77	85
			at rated load	%	–	66	58	48	42	54	47	39	41	39	37	36
		At 2 km/h	unloaded	%	–	111	103	89	68	75	69	61	72	64	57	62
			at rated load	%	–	50	44	38	33	42	37	31	32	31	29	29
Drawbar pull	Max	kN	–	143	143	138	138	138	138	138	138	138	138	138		
Noise	Noise level according to EN12053	LpAZ (inside) Spirit Delta	dB(A)	–	74	74	74	74	74	74	74	74	74	74	74	
		LpAZ (inside) FlexGuard	dB(A)	–	85	85	85	85	85	85	85	85	85	85	85	
		LpAZ (inside) FlexCab	dB(A)	–	79	79	79	79	79	79	79	79	79	79	79	
	Noise level according to 2000/14/EC	LWA (outside)	dB(A)	–	110	110	110	110	110	110	110	110	110	110	110	

Drive trains – Cummins			Cummins QSB6.7 (164kW) Dana TE17000		
Drive train	Engine	Manufacturer – type designation		Cummins – QSB6.7 (Turbo-Intercooler)	
		Fuel – type of engine		Diesel – 4-stroke	
		Rating ISO 3046 – at revs	kW/hp – rpm	164/223 – 2200	
		Peak torque ISO 3046 – at revs	Nm – rpm	949 – 1500	
		Number of cylinders – displacement	cm ³	6 – 6702	
		Fuel consumption, normal driving	l/h	8-11	
	Gearbox	Manufacturer – type designation		Dana – TE17000	
		Clutch, type		Torque converter	
		Gearbox, type		Hydro-dynamic Powershift	
		Numbers of gears, forward – reverse		3 – 3	
Alternator	Type – power	W	AC – 1960		
Starting battery	Voltage – capacity	V – Ah	2×12 – 140		
Driving axle	Manufacturer – type		Kessler D81 – Differential and hub reduction		

Cummins QSB6.7 (164kW) with Dana TE17000			DCE 90-6	DCE 100-6	DCE 120-6	DCE 140-6	DCE 150-6	DCE 100-12	DCE 120-12	DCE 150-12	DCE 160-6	DCE 160-9	DCE 160-12	DCE 180-6	
Performance	Lifting speed	Unloaded	m/s	–	0,50	0,40	0,40	0,45	0,50	0,40	0,40	0,40	0,40	0,40	0,40
		At rated load	m/s	–	0,45	0,35	0,35	0,35	0,45	0,35	0,35	0,35	0,35	0,35	0,35
	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
		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
	Travelling speed, forward and reverse	Unloaded	km/h	–	31	31	32	32	32	32	32	32	32	32	32
		At rated load	km/h	–	31	31	32	32	32	31	31	31	31	31	31
Gradeability	Max	unloaded	%	–	>120	>120	>120	89	101	90	78	95	83	72	80
		at rated load	%	–	63	55	46	40	51	45	38	39	37	35	35
	At 2 km/h	unloaded	%	–	102	94	83	64	71	65	57	67	61	54	59
		at rated load	%	–	47	42	36	31	40	35	30	31	30	28	27
Drawbar pull	Max	kN	–	138	138	138	133	133	133	133	133	133	133	133	
Noise	Noise level according to EN12053	LpAZ (inside) Spirit Delta	dB(A)	–	74	74	74	74	74	74	74	74	74	74	74
		LpAZ (inside) FlexGuard	dB(A)	–	85	85	85	85	85	85	85	85	85	85	85
		LpAZ (inside) FlexCab	dB(A)	–	79	79	79	79	79	79	79	79	79	79	79
	Noise level according to 2000/14/EC	LWA (outside)	dB(A)	–	111	111	111	111	111	111	111	111	111	111	111



A quality machine for optimum overall economy

Reducing operating costs

The Kalmar 9 – 18 range consists of a series of models that have been designed in every aspect to provide long life with minimum downtime. This has been achieved by using technical solutions and components, but not subjecting the truck to built in stresses that result in unnecessary wear and higher costs.

Optimised chassis modules, frames, dynamic stability, electronically controlled power trains, wet disc brakes, more reliable and more efficient hydraulic systems, smart options such as variable piston pumps or opti rev, and last but not least, an unbelievable driving experience. It is the entire package that determines the quality.



Greater service intervals

Service intervals for the Kalmar 9 – 18 tonne range are only after 500 hours of driving. The longer service interval will reduce the operating cost of the machine – and decrease the service downtime.

Fast service and maintenance

The Kalmar 9 – 18 tonne range has been designed to provide the best possible accessibility. Tilting the cabin and opening the engine cover exposes the entire power train with easy accessibility to all vital components and service points.

Daily inspection

Daily inspections must be simple and easy to carry out. All check points for daily inspection are directly accessible at ground level under the engine cover on the side of the truck. It can all be done in just a few minutes.

Opti rev – lower noise level, reduced fuel consumption and lower emissions

The system, which is patented, reduces noise and keeps fuel consumption to minimum during lifting sequences in the operating cycle by optimising the engine revolutions compared to the weight of the load, deflection of the mast and the machine speed at the time. The intelligent and microprocessor-controlled opti rev system is variable and installed in parallel with the standard hydraulic system.



The sliding seal in mast and carriage creates fewer lubrication points and can easily be adjusted and replaced.



All hydraulic hoses are fitted with ORFS-couplings.



Daily inspection is simple and can be performed from ground level.



The air filter is easy accessible under the bonnet.

Parts and service

The final piece that makes the DCE90-180 a pre-eminent team player is parts & service. Kalmar has a truly comprehensive programme of service for ownership, rental, and much more.

All machines will need parts and service sooner or later and there is no difference with Kalmar. What differentiates Kalmar is the excellent after market support. Kalmar is well prepared with warehouses in all continents and local distribution centres for parts through either sales companies or dealers. Kalmar's long experience and global presence provide excellent customer service all around the globe.



Kalmar DCE at work

The Kalmar DCE90-180 range is versatile and is proven to be effective for an array of applications around the world. A few examples of these many uses include:

- Wood, Pulp & Paper
- Ports & Stevedoring
- Concrete, Brick & Stone
- Steel, Metal and Engineering
- Automotive
- Mining
- Etc.

Safety and the environment

The Kalmar DCE 90-180 is CE marked, its construction complies with the following standards:

- The Machinery Directive 98/37/EC
- The EMC Directive 89/336/EC
- The Noise Emission Directive 2005/88/EC
- The Exhaust Gas Directive 2004/26/EC



Contact information:

Kalmar global partner

Local presence

Kalmar is a global supplier of heavy materials handling equipment and services for ports, terminals, industry and intermodal handling.

Local presence means that we can support our customers throughout the product's life cycle, wherever they are located.

There are 17 Kalmar sales companies that support dealers and agents in 140 countries around the world.



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Make things easy

