DP100NM1 - DP120NM1 - DP135NM1 DP150NM1

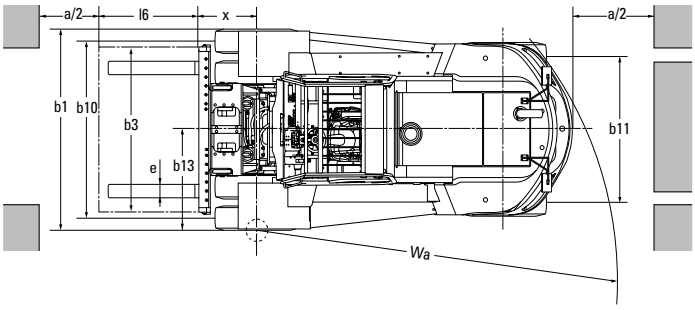
Specifications

Engine powered lift trucks

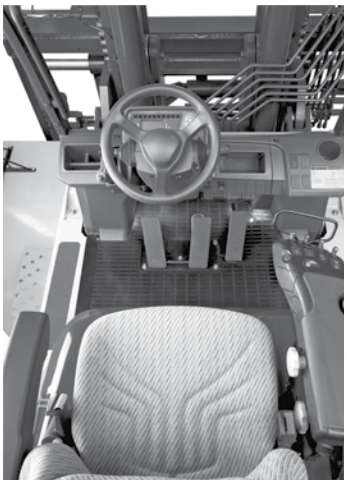
10.0 - 15.0 tonnes

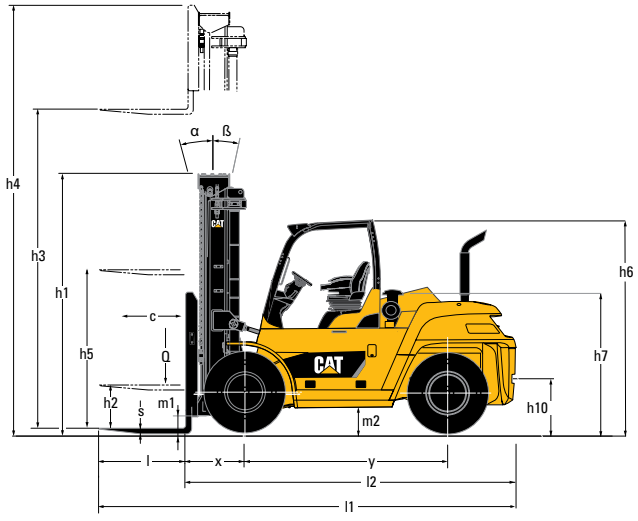
	Characteristics					
1.1	Manufacturer (abbreviation)		Cat Lift Trucks	Cat Lift Trucks	Cat Lift Trucks	
1.2	Manufacturer's model designation		**DP100NM1**	**DP120NM1**	**DP135NM1**	
1.3	Power source: (battery, diesel, LP gas, petrol)		Diesel	Diesel	Diesel	
1.4	Operator type: pedestrian, (operator)-standing, -seated		Seated	Seated	Seated	
1.5	Lifting capacity	Q (kg)	10000	12000	13500	
1.6	At load centre	c (mm)	600	600	600	
1.8	Load distance	x (mm)	770	780	800	
1.9	Wheelbase	y (mm)	2800	2800	2800	
	Weight					
2.1	Truck weight, without load / including battery (simplex mast, lowest lift height)	kg	14550	15800	17430	
2.2	Axle loading with maximum load, front/rear (simplex mast, lowest lift height)	kg	22120 / 2430	25095 / 2705	27910 / 3020	
2.3	Axle loading without load, front/rear (simplex mast, lowest lift height)	kg	7230 / 7320	7200 / 8600	7675 / 9755	
	Wheels, Drive Train					
3.1	Tyre type: V=solid, L=pneumatic, SE=solid pneumatic - front/rear		L / L	L / L	L / L	
3.2	Tyre dimensions, front		10.00 x 20 - 14 PR	10.00 x 20 - 16 PR	12.00 x 20 - 18 PR	
3.3	Tyre dimensions, rear		10.00 x 20 - 14 PR	10.00 x 20 - 16 PR	12.00 x 20 - 18 PR	
3.5	Number of wheels, front/rear (x=driven)		4x / 2	4x / 2	4x / 2	
3.6	Distance between centreline of tyres, front	b10 (mm)	1900	1900	1905	
3.7	Distance between centreline of tyres, rear	b11 (mm)	1965	1965	1925	
	Dimensions					
4.1	Mast tilt, forwards/backwards	∂/ß (°)	15 / 12	15 / 12	15 / 12	
4.2	Height with mast lowered (see tables)	h1 (mm)	3087	3087	3332	
4.3	Free lift (see tables)	h2 (mm)	72	72	88	
4.4	Lift height (see tables)	h3 (mm)	3072	3072	3088	
4.5	Overall height with mast raised	h4 (mm)	4486	4486	4927	
4.7	Height to top of overhead guard	h6 (mm)	2915	2915	2960	
4.8	Seat height	h7 (mm)	1915	1915	1960	
4.12	Tow coupling height	h10 (mm)	695	695	740	
4.19	Overall length	l1 (mm)	5530	5610	5755	
4.20	Length to fork face (includes fork thickness)	l2 (mm)	4310	4390	4535	
4.21	Overall width	b1/b2 (mm)	2515	2515	2605	
4.22	Fork dimensions (thickness, width, length)	s, e, l (mm)	72 x 180 x 1220	79 x 180 x 1220	88 x 180 x 1220	
4.23	Fork carriage to DIN 15 173 A/B/no		No	No	No	
4.24	Fork carriage width	b3 (mm)	2010	2010	2260	
4.31	Ground clearance under mast, with load	m1 (mm)	260	260	305	
4.32	Ground clearance centre of wheelbase, with load (forks lowered)	m2 (mm)	310	310	355	
4.33	Working aisle width with 1000 x1200 mm pallets, crosswise	Ast (mm)	5970	6040	6160	
4.34a	Working aisle width with 800 x1200 mm pallets, lengthwise	Ast (mm)	6170	6240	6360	
4.35	Turning circle radius	Wa (mm)	4000	4060	4160	
4.36	Minimum distance between centres of rotation	b13 (mm)	1565	1565	1565	
	Performance					
5.1	Travel speed, with/without load	km/h	24.5 / 30.0	22.5 / 29.5	21.0 / 30.0	
5.2	Lifting speed, with/without load	m/s	0.46 / 0.50	0.39 / 0.50	0.34 / 0.42	
5.3	Lowering speed, with/without load	m/s	0.46 / 0.50	0.46 / 0.50	0.48 / 0.42	
5.5	Rated drawbar pull, with/without load	N	106000 / 33000	106000 / 33000	96000 / 33000	
5.7	Gradeability, with/without load	%	42.1 / 21.7	42.3 / 19.7	33.2 / 18.8	
5.10	Service brakes (mechanical/hydraulic/electric/pneumatic)		Pneumatic	Pneumatic	Pneumatic	
	I.C. engine					
7.1	Manufacturer / Type		6D16-TL	6D16-TL	6D16-TL	
7.2	Rated /Nominal output to ISO 1585	kW	100	100	100	
7.3	Rated speed to DIN 70 020	rpm	2200	2200	2200	
7.4	Number of cylinders / cubic capacity	/cm³	6 / 7550	6 / 7550	6 / 7550	
	Miscellaneous					
8.1	Type of drive control		Powershift / 3	Powershift / 3	Powershift / 3	
8.2	Maximum operating pressure for attachments	bar	206	206	206	
8.3	Oil flow for attachments	l/min	-	-	-	
8.4	Noise level, mean value at operator's ear	dB (A)	85	85	85	
8.5	Towing coupling design / DIN type, ref.		Pin	Pin	Pin	

Ast = Wa + x + l6 + a
Ast = Working aisle width with load
a = Safety clearance (200 mm)
l6 = Pallet length (800 or 1000 mm)
b12 = Pallet width (1200 mm)



	Cat Lift Trucks
	DP150NM1
	Diesel
	Seated
	15000
	600
	805
	3100
	17960
	29920 / 3040
	8120 / 9840
	L / L
	12.00 x 20 - 18 PR
	12.00 x 20 - 18 PR
	4x / 2
	1905
	1925
	15 / 12
	3332
	88
	3088
	4927
	2960
	1960
	735
	6060
	4840
	2605
	88 x 180 x 1220
	No
	2280
	300
	355
	6555
	6755
	4550
	1815
	19.5 / 29.5
	0.33 / 0.42
	0.48 / 0.42
	96000 / 37000
	31.0 / 19.7
	Pneumatic
	6D16-TL
	100
	2200
	6 / 7550
	Powershift / 3
	206
	-
	85
	Pin





Lower Cost of Ownership

- Robust steel frame designed using Finite Element Analysis gives durable structure with low centre of gravity, resulting in higher residual capacity.
- Fully floating drive axle adds extra durability and capacity compared to semi- or non-floating alternatives.
- Steer axle construction as a single solid unit maximises strength and rigidity.
- Dependable engine and strong resistance of all truck components to damage and wear helps minimise repair and service bills.
- Easy and quick access to all areas for routine checks and maintenance keeps truck in sound working condition, saves time and reduces expense.

Unmatched Productivity

- High-powered 6D16 inline 6-cylinder 7.5 litre diesel engine provides superior performance.
- Automatic transmission in drive train converts engine power directly into torque, with three forward and three reverse speeds, to tackle heavy-duty applications effectively.
- Low-speed torque delivers controlled but powerful acceleration for maximum productivity, while fast-response turbocharger further enhances driver experience and output.
- Design of frame and counterweight optimises weight positioning and residual capacity for strong lifting.

Safety and Ergonomics

- Noise and vibration limitation features include rubber-mounted key components, fully insulated steel engine hood and helical transmission gears.
- Electronic direction control permits easy and smooth shifting between forward and reverse travel, without removing hands from steering wheel, at any speed up to 4.0 km/h.
- Fully hydrostatic assisted steering via small-diameter steering wheel ensures accurate and rapid response with little effort.
- Counterweight design allows small turning circle and clear view to the rear for precise manoeuvring.
- Mast with narrow channels and small-diameter lift cylinders increases forward vision and uses six load rollers with side rollers to achieve high load stability.
- Choice of up-to-date, ergonomic fingertip or lever controls is available for precise, low-effort operation of hydraulic functions.
- Presence Detection System (PDS) gives audible warning if seat belt is not fastened and prevents all travel and hydraulic movement if operator is not correctly seated.
- Tiltable steering column, adjustable full-suspension seat and generous legroom allow each user to find the perfect driving position.
- Conveniently placed grab bars and steps ease access to operator compartment.

Options

- Engine Shutdown System (ESS) stopping engine in the event of:
  - o Transmission temperature >110 °C
  - o Coolant temperature >107 °C
  - o Engine oil pressure <24 kPa
- Oil-cooled disc brakes.
- High-comfort cabin.
- Fingertip hydraulic control (electric over hydraulic).
- Wide range of side shifters and fork positioners.

Cat® Lift Trucks.

Your partner in materials handling.

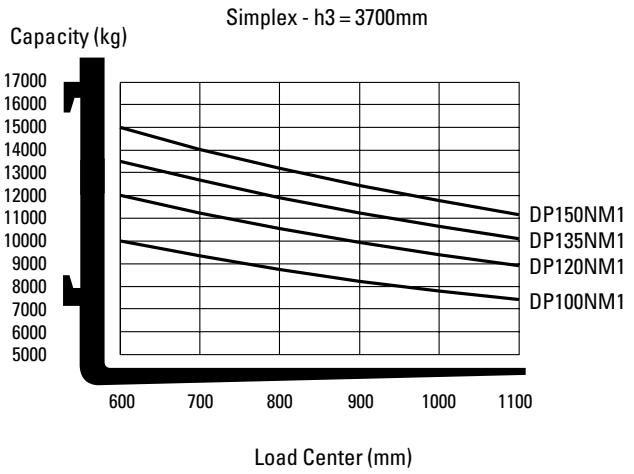
	DP100NM1 / DP120NM1					DP100NM1	DP120NM1
Mast Type	h3 mm	h1 mm	h4 mm	h2 mm	Tilt angle (fwd./ back)	Q @ c = 600mm kg	Q @ c = 600mm kg
Simplex	3072	3087	4486	72	15°/12°	10000	12000
	3572	3337	4986	72	15°/12°	10000	12000
	3772	3437	5186	72	15°/12°	10000	12000
	4072	3587	5486	72	15°/12°	10000	12000
	4572	3837	5986	72	15°/12°	10000	12000
	5072	4087	6486	72	15°/12°	10000	12000
	5572	4337	6986	72	15°/12°	10000	12000
	6072	4637	7486	72	6°/6°	9800	11800

	DP135NM1 / DP150NM1					DP135NM1	DP150NM1
Mast Type	h3 mm	h1 mm	h4 mm	h2 mm	Tilt angle (fwd./ back)	Q @ c = 600mm kg	Q @ c = 600mm kg
Simplex	3088	3332	4927	88	15°/12°	13500	15000
	3588	3632	5427	88	15°/12°	13500	15000
	3788	3732	5627	88	15°/12°	13500	15000
	4088	3882	5927	88	15°/12°	13500	15000
	4588	4132	6427	88	15°/12°	13500	15000
	5088	4382	6927	88	15°/12°	13500	15000
	5588	4682	7427	88	15°/12°	13500	15000
	6088	4932	7927	88	6°/6°	13300	14600

Mast Performance and Capacity

h1 Height with mast lowered
h2 Standard free lift
h3 Lift height
h4 Height with mast raised
h5 Full free lift
Q Lifting capacity, rated load
c Load centre (distance)

Capacities at various load centers



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NOTE: Performance specifications may vary depending on standard manufacturing tolerances, vehicle condition, types of tyres, floor or surface conditions, applications, or operating environment. Trucks may be shown with non-standard options. Specific performance requirements and locally available configurations should be discussed with your Cat lift trucks Dealer. Cat Lift Trucks follows a policy of continual product improvement. For this reason, some materials, options and specifications could change without notice.