

New Reach Truck  
XR<sup>09</sup>



Added value  
for your warehouse





The Reach Truck XR<sup>09</sup> is ideal for handling palletized loads in warehouses and distribution centres where high levels of **efficiency** and **speed** are crucial. This very reliable truck has been designed to ensure high levels of **productivity** and intensive use, including driving over long routes on smooth, even surfaces and operating continuously. The possibility to simultaneously control all the hydraulic functions and so perform combined movements is an important **plus** because this truck can thus achieve **superior levels of performance**.

# Outstanding performance, high productivity



## Stability, solidity and compactness

The high-strength steel chassis plus technological solutions inspired by the automotive industry provides the XR<sup>09</sup> with a solid load-bearing structure while still maintaining its **lean, dynamic design**. The detailed analysis of the distribution of the masses involved guarantees **maximum stability** in all operating situations. Nominal capacities from 1200 to 2000 kg, with Triplex full free lift masts ensure **excellent residual capacities** and **high visibility** for reaching working heights of up to 11,525 mm in **complete safety**.

## Maximum reliability

The XR<sup>09</sup> Reach Truck has proven itself to be a champion of **reliability**, requiring less maintenance which has been greatly simplified by the easy access to the service components and **intuitive diagnostics** through a dedicated, easy-to-use console. The XR<sup>09</sup> truck is equipped with modern AC motors and electrical systems and wiring protected to IP 45 at a minimum, meaning that it is dust-proof and spray-proof.

## Conformity to european standards

Having passed all the tests required in order to obtain the CE mark, such as the structural strength analysis, stability test, visibility test, electromagnetic compatibility test and the noise and vibration test, the XR<sup>09</sup> Reach Truck has been designed and manufactured to **the European Machinery Directive** standards. The XR<sup>09</sup> truck can load and unload rapidly even in **narrow storage aisles**.



# Safety and ergonomics



The cab of the XR<sup>09</sup> has been specifically designed around the operator, providing complete safety and protection and easy reach of all the controls. Both the hydraulic functions and the electrical controls have been **ergonomically** arranged for easy access and intuitive operation. All the proportionally controlled hydraulic functions are operated by means of potentiometric micro-levers ("fingertips") to ensure smooth, precise **control** of movements. A soft armrest covered in breathable fabric allows the operator to work in total comfort. The steering wheel with knob has a small diameter so that the truck can be **manoeuvred quickly and effortlessly**.



#### Driving comfort and visibility

The driver's seat is upholstered in strong, breathable fabric and is higher than in most reach trucks, providing the operator greater **visibility**. The bucket suspension seat can be **adjusted and adapted** to the operator's height and weight to ensure maximum **driving comfort**.

#### Adaptability and adjustment

The steering column can also be tilted into the most suitable position, and a large, comfortable headrest allows the operator to keep his/her head in the right position without having to bend or lean forward. The overhead guard profiles have been configured to provide the greatest **visibility** of the shelving. The foot mat is soft and ensures the proper grip.

#### Information and customization

The multifunctional LCD display allows the operator to see all the information about the status and operation of the machine and any optional equipment. Up to 5 different work programs can be selected to meet various specific needs (4 preset speed profiles that can be operated from the display + 1 slow operation profile that can be operated directly with the "tortoise" button).



# Winning technology solutions

All the models in the XR<sup>09</sup> series are equipped with strong, powerful traction motors that can reach **the top speeds** within the entire product range (**12 km/h**). The proportional valve technology ensures smooth, precise operation of the hydraulic functions and allows them to be **combined**, an outstanding advantage in terms of **productivity**.

The side-shift function has been integrated into the fork carriage, while the **tilting function** is now available **on the entire mast** up to lifting heights of 7,100 mm, **as well as on the forks only**.



## Braking systems

As many as 3 **Independent braking systems** are standard equipment on all the XR<sup>09</sup> models: the electric brake with **energy recovery**, which is activated when the accelerator pedal is released or the direction of travel is reversed; the hydraulic brake, which acts on the two load wheels when the brake pedal is pressed; the electromagnetic parking brake, which is activated in parking mode when the truck is switched off or in emergency mode when the red safety button is pressed.



## Energy savings

The combination of high-performance motors and a state-of-the-art electronic control system allows the XR<sup>09</sup> to **optimize its use of energy**, thus **reducing consumption** and extending the life of the battery, which occurs for example in the case of energy recovery whenever the brake is operated.



## Eco-sustainability

The XR<sup>09</sup> Reach Truck is built entirely with eco-friendly components, using **recyclable materials** and high-quality technological processes that also reduce **waste** to a minimum. Even the painting process of the XR<sup>09</sup> is controlled so that it does not produce environmentally harmful emissions.



### State-of-the-art electronic systems

The XR<sup>09</sup> uses a **high-frequency electronic system** for traction and lift control to guarantee silent operation and energy savings. A separate electronic system controls the electric power steering, while data transmission is managed through a **can-bus system**. All the machine's **performance parameters**, such as traction speed and acceleration, electric braking and hydraulic functions, can be **adjusted** to suit the operator's preferences.



# XR<sup>09</sup> Technical data

VDI 2198

Specification	1.1	Manufacturer		OM	
	1.2	Model		XR <sup>09</sup> 12	
	1.3	Power unit		electric	
	1.4	Operator type		seated	
	1.5	Loading capacity	Q (t)	1,2	
	1.6	Centre of gravity	c (mm)	600	
	1.8	Load distance, centre of drive axle to fork	x (mm)	376 <sup>(2)</sup> 303 <sup>(2)</sup>	
	1.9	Wheel base	y (mm)	1370	
	Weights	2.1	Weight battery included	kg	3110 3310
2.3		Axles unladen weight	kg	2020 / 1090 2070 / 1240	
2.4		Axles laden weight - reach out	kg	690 / 3820 800 / 3910	
2.5		Axles laden weight - reach in	kg	1790 / 2720 1765 / 2945	
Wheels and Tyres		3.1	Tyre type		VULKOLLAN
	3.2	Size of traction wheels	mm	343 x 136	
	3.3	Size of load wheels	mm	310 x 102	
	3.5	Wheels: number at front/back (x = traction)		1x / 2	
	3.6	front track (drive wheels)	b10 (mm)	-	
	3.7	Rear track (load wheels)	b11 (mm)	1140	
	Dimensions and Overall Sizes	4.1	Tilt (forward $\alpha$ / backward $\beta$ )	Mast tilt h3 $\leq$ 5750 Mast tilt h3 $\geq$ 5900 Fork tilt	degrees (°) -1 / +3 -0,5 / +2 -2 / +4
4.2		Closed mast height	h1 (mm)	see table	
4.3		Free lift	h2 (mm)	see table	
4.4		Lifting range	h3 (mm)	see table	
4.5		Height of mast extended	h4 (mm)	see table	
4.7		Height of driver's overhead guard	h6 (mm)	2200	
4.8		Height of seat	h7 (mm)	1050	
4.10		Height of reach legs	h8 (mm)	330	
4.19		Total length	l1 (mm)	2400 <sup>(1)</sup> 2473 <sup>(1)</sup>	
4.20		Length to fork face	l2 (mm)	1250 <sup>(1)</sup> 1323 <sup>(1)</sup>	
4.21		Total width	b1 (mm)	1250	
4.22		Fork dimensions	s/e/l (mm)	40 / 100 / 1150	
4.23		Fork carriage		FEM II B	
4.25		Forks spread (outside)	b5 (mm)	620	
4.26		Reach legs width (inside)	b4 (mm)	914	
4.28		Reach	l4 (mm)	586 <sup>(2)</sup> 513 <sup>(2)</sup>	
4.31		Ground clearance under mast - laden	m1 (mm)	100	
4.32		Ground clearance at wheel-base centre - laden	m2 (mm)	76	
4.33		90° stacking aisle 1000 x 1200 crosswise	Ast (mm)	2699 <sup>(3)</sup> 2753 <sup>(3)</sup>	
4.34		90° stacking aisle 1200 x 800 crosswise	Ast (mm)	2749 <sup>(4)</sup> 2815 <sup>(4)</sup>	
Performances		4.35	Minimum turning radius	Wa (mm)	1633
		4.37	Length including reach legs	l7 (mm)	1798
		5.1	Travel speed (loaded/unloaded)	km/h	12 / 12
		5.2	Lifting speed (loaded/unloaded)	m/s	0,38 / 0,60
		5.3	Lowering speed (loaded/unloaded)	m/s	0,52 / 0,44
		5.7	Max gradient KB30'	(loaded/unloaded)	% 10 / 15
		5.8	Max climbing gradient KB5'	(loaded/unloaded)	% 10 / 15
	5.10	Service brake			
	Engines	6.1	Traction motor, performance KB 60'	kW	6
		6.2	Lifting motor, performance 15% ED	kW	11,5
6.3		Battery standard		DIN 43531 C	
6.4		Voltage / Rated capacity	V / Ah	48 / 420 48 / 560	
Others	6.5	Weight of battery (+/-5%)	kg	750 939	
	6.6	Power consumption according to VDI cycle	kWh/h	4,6	
	8.1	Type of control		Electronic tri-phase	
	8.2	Working pressure for attachment	bar	140	
	8.3	Oil capacity	l/min	18	
	8.4	Noise level for operator	dB (A)	< 70	

For tilting masts without sideshift:  
 (1) Δ= - 31mm (2) Δ= + 31mm  
 (3) Δ= - 23 mm (4) Δ= - 28mm

Values reported are meant to be indicative and not binding  
 and refer to standard versions.

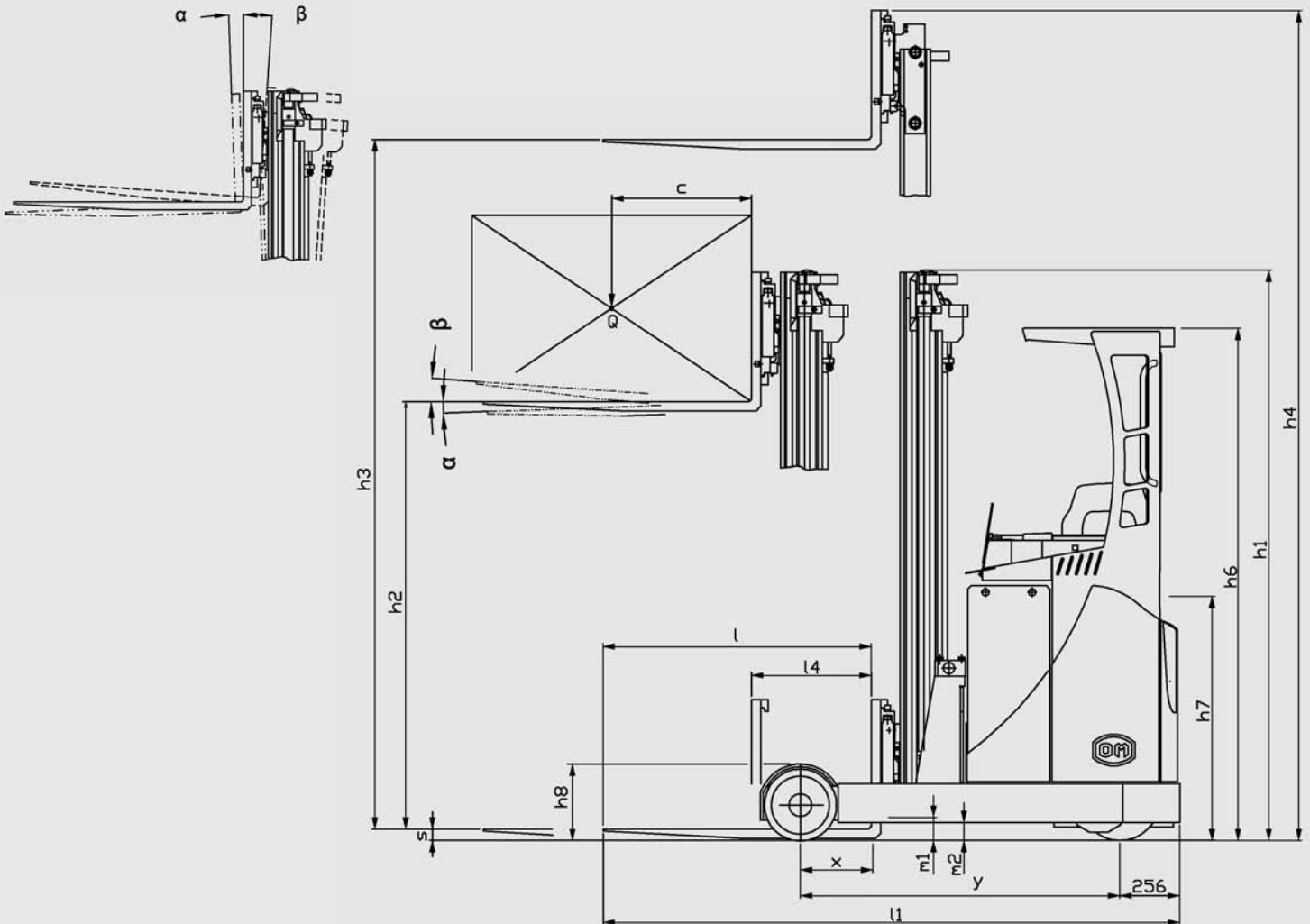
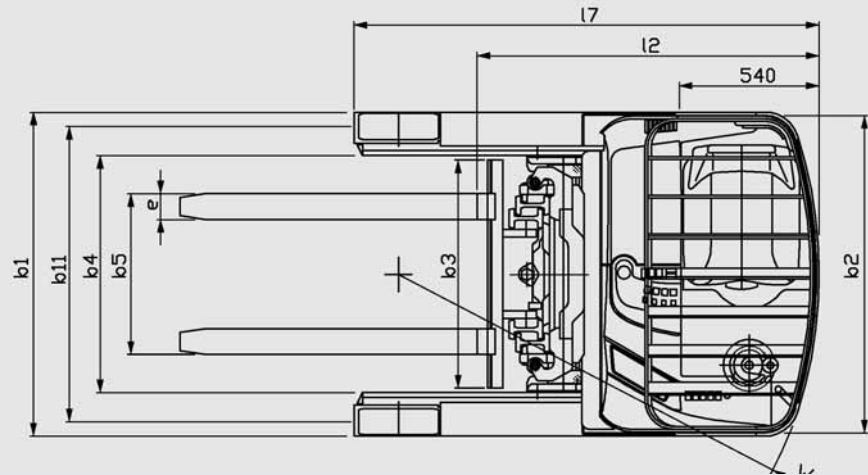
OM			OM			OM			OM
XR <sup>09</sup> 14			XR <sup>09</sup> 16			XR <sup>09</sup> 20			XR <sup>09</sup> 20 with reinforced mast
electric			electric			electric			electric
seated			seated			seated			seated
1,4			1,6			2			2
600			600			600			600
376 <sup>(2)</sup>	303 <sup>(2)</sup>	230 <sup>(2)</sup>	438 <sup>(2)</sup>	365 <sup>(2)</sup>	292 <sup>(2)</sup>	437			364
1370			1442			364			1514
3110	3310	3500	3140	3340	3530	1514	3520	3710	4150
2020 / 1090	2070 / 1240	2100 / 1400	2070 / 1070	2125 / 1215	2160 / 1370	2280 / 1240		2330 / 1380	2480 / 1670
690 / 3820	800 / 3910	895 / 4005	620 / 4120	730 / 4210	830 / 4300	675 / 4845		775 / 4935	755 / 5395
1790 / 2720	1765 / 2945	1720 / 3180	1890 / 2850	1860 / 3080	1820 / 3310	2070 / 3450		2015 / 3695	2170 / 3980
VULKOLLAN			VULKOLLAN			VULKOLLAN			VULKOLLAN
343 x 136			343 x 136			343 x 136			343 x 136
310 x 102			310 x 102			310 x 102			310 x 102
1x / 2			1x / 2			1x / 2			1x / 2
-			-			-			-
1140			1140			1140			1140
-1 / +3			-1 / +3			-			-
-0,5 / +2			-0,5 / +2			-			-
-2 / +4			-2 / +4			-2 / +4			-2 / +4
see tablele			see tablele			see tablele			see tablele
see tablele			see tablele			see tablele			see tablele
see tablele			see tablele			see tablele			see tablele
see tablele			see tablele			see tablele			see tablele
2200			2200			2200			2200
1050			1050			1050			1050
330			330			330			330
2400 <sup>(1)</sup>	2473 <sup>(1)</sup>	2546 <sup>(1)</sup>	2410 <sup>(1)</sup>	2483 <sup>(1)</sup>	2556 <sup>(1)</sup>	2483		2556	2556
1250 <sup>(1)</sup>	1323 <sup>(1)</sup>	1396 <sup>(1)</sup>	1260 <sup>(1)</sup>	1333 <sup>(1)</sup>	1406 <sup>(1)</sup>	1333		1406	1406
1250			1250			1250			1250
40 / 100 / 1150			50 / 100 / 1150			50 / 100 / 1150			50 / 100 / 1150
FEM II B			FEM II B			FEM II B			FEM II B
620			620			620			620
914			914			914			914
586 <sup>(2)</sup>	513 <sup>(2)</sup>	440 <sup>(2)</sup>	658 <sup>(2)</sup>	585 <sup>(2)</sup>	512 <sup>(2)</sup>	657		586	586
100			100			100			100
76			76			76			76
2699 <sup>(3)</sup>	2753 <sup>(3)</sup>	2809 <sup>(3)</sup>	2724 <sup>(3)</sup>	2776 <sup>(3)</sup>	2830 <sup>(3)</sup>	2793		2844	2844
2749 <sup>(4)</sup>	2815 <sup>(4)</sup>	2882 <sup>(4)</sup>	2763 <sup>(4)</sup>	2828 <sup>(4)</sup>	2894 <sup>(4)</sup>	2831		2897	2897
1633			1702			1770			1770
1798			1870			1942			1942
12 / 12			12 / 12			12 / 12			12 / 12
0,38 / 0,60			0,32 / 0,60			0,18 / 0,48			0,26 / 0,26
0,52 / 0,46			0,54 / 0,46			0,50 / 0,40			0,50 / 0,50
10 / 15			10 / 15			9,5 / 15			9 / 15
10 / 15			10 / 15			9,5 / 15			9 / 15
Generator / Hydromechanic with pedal on load wheels									
6			6			6			6
11,5			11,5			11,5			11,5
DIN 43531 C			DIN 43531 C			DIN 43531 C			DIN 43531 C
48 / 420	48 / 560	48 / 700	48 / 420	48 / 560	48 / 700	48 / 560		48 / 700	48 / 700
750	939	1119	750	939	1119	939		1119	1119
4,9			5,2			5,2			6,3
Electronic tri-phase			Electronic tri-phase			Electronic tri-phase			Electronic tri-phase
140			140			140			140
18			18			18			18
< 70			< 70			< 70			< 70

# XR<sup>09</sup> Technical data

$$A_{st} = W_a + R + a$$

$$R = \sqrt{(l_6 - x)^2 + \left(\frac{b_{12}}{2}\right)^2}$$

$$a = 200 \text{ mm}$$



## RESIDUAL CAPACITIES

Capacity [kg]	h3 [mm]	4825	5000*	5575	5750*	6625	6500*	7100*	7825	8375	8825	9225	9625	10025	10625	11525
	h2 [mm]	1570	1570	1820	1820	2170	2070	2270	2570	2820	2970	3270	3270	3670	3870	4270
	h1 [mm]	2200	2200	2450	2450	2800	2700	2900	3200	3450	3600	3900	3900	4300	4500	4900
	h4 [mm]	5455	5630	6205	6380	7255	7130	7730	8455	9205	9455	9855	10255	10655	11255	12155
XR <sup>09</sup> 12	Battery tray 323 (375-420-465 Ah)	-	1200	-	1200	-	1000	-	-	-	-	-	-	-	-	-
	Battery tray 324 (500-560-620 Ah)	-	1200	-	1200	-	1050	-	-	-	-	-	-	-	-	-
XR <sup>09</sup> 14	Battery tray 323 (375-420-465 Ah)	-	1400	-	1400	-	1300	1250	-	-	-	-	-	-	-	-
	Battery tray 324 (500-560-620 Ah)	-	1400	-	1400	-	1400	1300	1250	1100	1050	-	800	-	-	-
	Battery tray 325 (625-700-775 Ah)	-	1400	-	1400	-	1400	1350	1350	1200	1150	-	950	-	-	-
XR <sup>09</sup> 16	Battery tray 323 (375-420-465 Ah)	-	1600	-	1600	-	1500	1400	-	-	-	-	-	-	-	-
	Battery tray 324 (500-560-620 Ah)	-	1600	-	1600	-	1600	1600	1600	1500	1400	-	1200	-	-	-
	Battery tray 325 (625-700-775 Ah)	-	1600	-	1600	-	1600	1600	1600	1500	1400	-	1300	-	-	-
XR <sup>09</sup> 20	Battery tray 324 (500-560-620 Ah)	2000	-	1900	-	1700	-	-	-	-	-	-	-	-	-	-
	Battery tray 325 (625-700-775 Ah)	2000	-	2000	-	1900	-	-	1700	1600	1500	-	1300	-	-	-
XR <sup>09</sup> 20 <small>Heavy Duty</small>	Battery tray 325 (625-700-775 Ah)	-	-	-	-	-	-	-	-	-	-	1450	-	1300	1150	850

\* Available both with tilting on mast and with tilting on forks



### Accessories and special versions

A wide range of accessories is available for the XR<sup>09</sup> series, such as the **joystick** for controlling all the functions, the **working lights**, the **camera on the forks** to facilitate loading and unloading operations at maximum heights, the **altimeter** to see the lift height of the forks and the **height preselector** for setting up to 160 predefined height levels, which can be selected by the simple press of a button. The XR<sup>09</sup> is also available in "drive-in" and "cold stores" versions, with or without safety cab.

Reliability  
Customer's friendliness  
Dynamism

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### Reliability

Each OM product  
brings inside more than 50  
years of experience in the sector

### Customer's friendliness

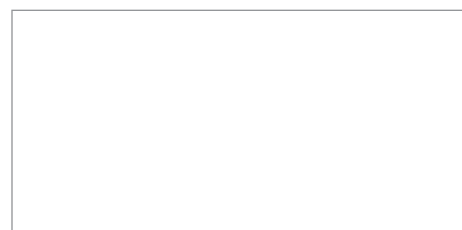
All the OM products  
have been conceived and designed  
to lighten your workload

### Dynamism

Energy in motion:  
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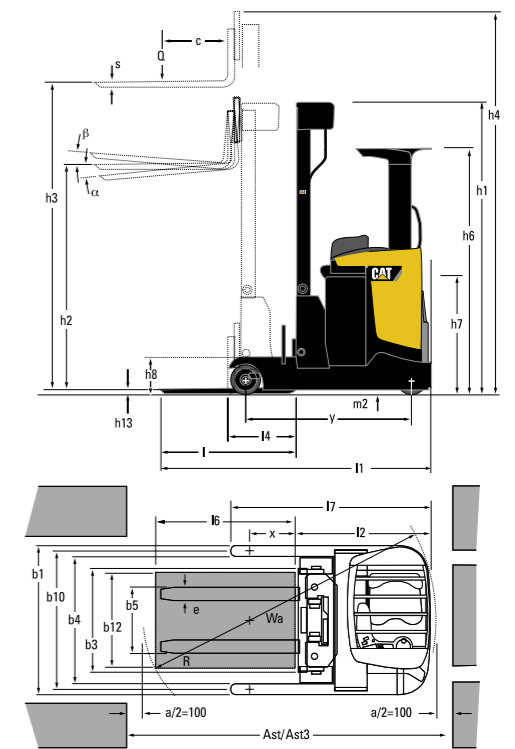
**NR14N - NR14NH - NR16N - NR16NHC  
NR16NC - NR16NS - NR16NH - NR16NHS  
NR20NH - NR25NH**

Specifications

**Reach trucks**

1.4 - 2.5 tonnes

Characteristics			Cat Lift Trucks	Cat Lift Trucks	Cat Lift Trucks	Cat Lift Trucks	Cat Lift Trucks		Cat Lift Trucks	Cat Lift Trucks	Cat Lift Trucks	Cat Lift Trucks	Cat Lift Trucks
1.01	Manufacturer (abbreviation)		NR14N	NR14NH	NR16N	NR16NH	NR16NS		NR16NHS	NR16NC	NR16NHC	NR20NH	NR25NH
1.02	Manufacturer's model designation		Battery	Battery	Battery	Battery	Battery		Battery	Battery	Battery	Battery	Battery
1.03	Power source: (battery, diesel, LP gas, petrol)		Seated	Seated	Seated	Seated	Seated		Seated	Seated	Seated	Seated	Seated
1.04	Operator type: pedestrian, (operator)-standing, -seated		Q (kg)	1400	1400	1600	1600	1600	1600	1600	1600	2000	2500
1.05	Load capacity		c (mm)	600	600	600	600	600	600	600	600	600	600
1.06	Load centre distance		x (mm)	See Table	See Table	See Table	See Table	See Table	See Table	See Table	See Table	See Table	See Table
1.08	Load wheel axle to fork face (forks lowered)		y (mm)	1300	1300	1350	1350	1400	1400	1400	1400	1500	1500
1.09	Wheelbase		<b>Weight</b>										
2.01	Truck weight with nominal load & maximum battery weight	kg	4925	5652	5399	6126	5147		5852	5063	5793	6324	6910
2.03	Axle loadings without load & with maximum battery weight, drive/load side	kg	2065/1460	2348/1904	2135/1665	2415/2111	2065/1481		2348/1904	1980/1484	2254/1940	2337/1986	2371/2040
2.04	Axle loading, mast forward, with nominal load, drive/load side (lowest lift height)		745/4180	844/4808	756/4643	859/5267	730/4417		808/5044	650/4413	754/5039	816/5508	580/6330
2.05	Axle loading, mast retracted, with nominal load, drive/load side (lowest lift height)		1730/3195	2013/3639	1766/3633	2046/4080	1710/3437		2077/3775	1624/3440	1899/3895	1923/4401	1852/5058
<b>Wheels, Drive Train</b>			<b>Dimensions</b>										
3.01	Tyres: PT=Power Thane, Vul=Vulkollan, drive/load side		Vul/Vul	Vul/Vul	Vul/Vul	Vul/Vul	Vul/Vul		Vul/Vul	Vul/Vul	Vul/Vul	Vul/Vul	Vul/Vul
3.02	Tyre dimensions, drive side	(mm)	360x140	360x140	360x140	360x140	360x140		360x140	360x140	360x140	360x140	360x140
3.03	Tyre dimensions, load side	(mm)	285x75	285x75	285x130	285x130	285x75		285x75	285x75	285x75	285x130	285x130
3.05	Number of wheels, drive/load side (x=driven)		2/1x	2/1x	2/1x	2/1x	2/1x		2/1x	2/1x	2/1x	2/1x	2/1x
3.07	Track width (centre of tyres), load side	b11 (mm)	1195	1195	1140	1140	1195		1195	1025	1025	1140	1310
4.01	Fork tilt, forwards / backwards	$\alpha/\beta$ °	2/4	2/4	2/4	2/4	2/4		2/4	2/4	2/4	2/4	2/4
4.02	Height with mast lowered (see tables)	h1 (mm)	See Table	See Table	See Table	See Table	See Table		See Table	See Table	See Table	See Table	See Table
4.03	Free lift (see tables)	h2 (mm)	See Table	See Table	See Table	See Table	See Table		See Table	See Table	See Table	See Table	See Table
4.04	Lift height (see tables)	h3 (mm)	See Table	See Table	See Table	See Table	See Table		See Table	See Table	See Table	See Table	See Table
4.05	Overall height with mast raised	h4 (mm)	See Table	See Table	See Table	See Table	See Table		See Table	See Table	See Table	See Table	See Table
4.07	Height to top of overhead guard	h6 (mm)	2200	2200	2200	2200	2200		2200	2200	2200	2200	2200
4.08	Seat- or stand height	h7 (mm)	1100	1100	1100	1100	1100		1100	1100	1100	1100	1100
4.10	Height of load legs	h8 (mm)	360	360	360	360	360		360	360	360	360	360
4.15	Fork height, fully lowered	h13 (mm)	50	50	50	50	50		50	50	50	60	60
4.19	Overall length	l1 (mm)	See Table	See Table	See Table	See Table	See Table		See Table	See Table	See Table	See Table	See Table
4.20	Length to fork face (includes fork thickness)	l2 (mm)	See Table	See Table	See Table	See Table	See Table		See Table	See Table	See Table	See Table	See Table
4.21	Overall width	b1/b2 (mm)	1270	1270	1270	1270	1270		1270	1100	1100	1270	1440
4.22	Fork dimensions (thickness, width, length)	s / e / l (mm)	40/100	40/100	40/100	40/100	40/100		40/100	40/100	40/100	50/100	50/100
4.23	Fork carriage to DIN 15 173 A/B/no		FEM 2A	FEM 2A	FEM 2A	FEM 2A	FEM 2A		FEM 2A	FEM 2A	FEM 2A	FEM 2A	FEM 2A
4.24	Fork carriage width	b3 (mm)	720	720	720	720	720		720	720	720	720	720
4.25	Outside width over forks (minimum/maximum)	b5 (mm)	315-710	315-710	315-710	315-710	315-710		315-710	315-710	315-710	315-710	315-710
4.26	Innerwidth of load legs	b4 (mm)	1070	1070	900	900	1070		1070	900	900	900	1070
4.28	Mast reach	l4 (mm)	See Table	See Table	See Table	See Table	See Table		See Table	See Table	See Table	See Table	See Table
4.32	Ground clearance at centre of wheelbase, (forks lowered)	m2 (mm)	75	75	75	75	75		75	75	75	75	75
4.33a	Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise	Ast (mm)	See Table	See Table	See Table	See Table	See Table		See Table	See Table	See Table	See Table	See Table
4.34a	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise	Ast (mm)	See Table	See Table	See Table	See Table	See Table		See Table	See Table	See Table	See Table	See Table
4.35	Turning circle radius	Wa (mm)	1547	1547	1594	1594	1640		1547	1629	1629	1735	1749
4.37	Truck length over load legs	l7 (mm)	1693	1693	1743	1743	1793		1693	1793	1793	1893	1893
<b>Performance</b>			<b>Electric motors</b>										
5.01	Travel speed, with/without load	km/h	10/10	12/12	10/10	12/12	10/10		12/12	10/10	12/12	12/12	12/12
5.02	Lifting speed, with/without load	m/s	0.35/0.55	0.44/0.65	0.35/0.55	0.40/0.65	0.35/0.55		0.40/0.65	0.35/0.55	0.40/0.65	0.35/0.65	0.30/0.65
5.03	Lowering speed, with/without load	m/s	0.55/0.50	0.55/0.50	0.55/0.50	0.55/0.50	0.55/0.50		0.55/0.50	0.55/0.50	0.55/0.50	0.55/0.50	0.55/0.50
5.04	Reach speed, with/without load	m/s	0.20/0.20	0.20/0.20	0.20/0.20	0.20/0.20	0.20/0.20		0.20/0.20	0.20/0.20	0.20/0.20	0.20/0.20	0.20/0.20
5.08	Maximum gradeability, with/without load	%	10/15	10/15	10/15	8/12	10/15		10/15	10/15	10/15	8/12	7/12
5.09	Acceleration time (10 metres) with/without load	s	5.0/4.5	5.0/4.5	5.0/4.5	5.4/4.7	5.0/4.5		5.0/4.5	5.0/4.5	5.0/4.5	5.6/4.7	5.9/4.7
5.10	Service brakes (mechanical/hydraulic/electric/pneumatic)		Electric	Electric	Electric	Electric	Electric		Electric	Electric	Electric	Electric	Electric
<b>Electric motors</b>			<b>Miscellaneous</b>										
6.01	Drive motor capacity (60 min. short duty)	kW	7.5	7.5	7.5	7.5	7.5		7.5	7.5	7.5	7.5	7.5
6.02	Lift motor output at 15% duty factor	kW	10	14	10	14	10		14	10	14	14	14
6.04	Battery voltage/capacity at 5-hour discharge	V/Ah	48/465,620,775	48/620,775	48/465,620,775	48/620,775	48/465,620,775		48/620,775	48/465,620	48/620	48/620,775,930	48/620,775,930
6.05	Battery weight	kg	700,900,1100	900,1100	700,900,1100	900,1100	700,900,1100		900,1100	700,900	900	900,1100,1300	900,1100,1300
8.01	Type of drive control		Stepless	Stepless	Stepless	Stepless	Stepless		Stepless	Stepless	Stepless	Stepless	Stepless
8.04	Noise level, mean value at operator's ear (EN 12053)	dB(A)	67	71	67	71	67		71	67	71	71	71



$Ast$  = Working aisle width  
 $Wa$  = Turning radius  
 $a$  = Safety clearance = 2 x 100 mm  
 $R = \sqrt{(l6 - x)^2 + (b12 / 2)^2}$   
 $l6$  = Pallet length  
 $b12$  = Pallet width

### Lower Cost of Ownership

- Easy access to all components, pumps and the controller, combined with all the inherent benefits of AC power and a doubling of the maintenance interval to 600 hours, keeps the trucks working far longer than ever before between planned service visits.

### Unmatched Productivity

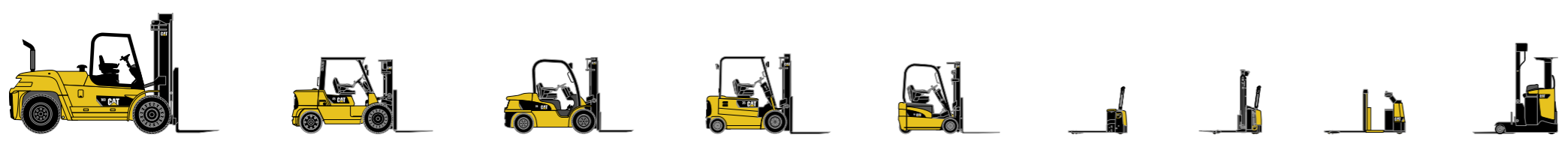
- Class leading capacity retention at maximum working heights combined with excellent visibility through the PoweRamic mast, fork carriage and overhead guard make these trucks top performers in any warehouse application.

### Safety and Ergonomics

- Improved chassis rigidity, a host of driver safety features and programmable mast damping make the NR-N reach trucks safe and productive without reducing performance.
- Standard battery rollers and the optional battery changing device make changing the battery a fast and safe procedure, without having to move the truck.
- By constantly monitoring drive speed, acceleration and traction the truck detects and takes action to prevent slipping of the drive wheel. This results in slip-free operation even on a wet surface.

### Options

- Working lights
- Special Chassis colour
- Radio/CD player and loudspeakers
- Options bar
- Rear view mirror
- List bracket
- PC support
- Overhead guard with mesh or plexi-glass
- Key switch
- Cooling fan
- Lowering stop
- Extra hydraulic valve and hosing to the fork carriage
- Fork positioner
- Camera on forks with monitor
- Telescopic forks
- Side shift and tilt function centering
- Load weight scale
- Power hook-up 12V 4.4 Amp
- Battery connector and cables
- Alarm for driving, lifting and lowering
- Quick battery locking system
- Battery changing device
- Cold store modification
- Cold store cabin
- High temperatures modification



# Cat<sup>®</sup> Lift Trucks.

## Your partner in materials handling.

NR14N - NR16N - NR16NS - NR16NC				
Mast Type	h3 <sup>1)</sup>	h1	h2 <sup>1)</sup>	h4 <sup>2)</sup>
	mm	mm	mm	mm
T	4800	2210	1560	5630
	5400	2410	1760	6230
	5700	2510	1860	6530
	5900	2577	1927	6730
	6300	2710	2060	7130
	7000	2943	2293	7830
	7500	3110	2460	8330

NR14NH - NR16NHC - NR16NHS				
Mast Type	h3 <sup>1)</sup>	h1	h2 <sup>1)</sup>	h4 <sup>2)</sup>
	mm	mm	mm	mm
T	8000	3297	2647	8830
	8500	3463	2813	9330
	9000	3785	3135	9830

NR16NH				
Mast Type	h3 <sup>1)</sup>	h1	h2 <sup>1)</sup>	h4 <sup>2)</sup>
	mm	mm	mm	mm
T	8000	3297	2647	8830
	8500	3463	2813	9330
	9000	3785	3135	9830
	9500	3952	3302	10330
	10000	4118	3468	10830
	10500	4285	3635	11330
	11000	4452	3802	11830
	11500	4618	3968	12330

NR20NH - NR25NH				
Mast Type	h3 <sup>1)</sup>	h1	h2 <sup>1)</sup>	h4 <sup>2)</sup>
	mm	mm	mm	mm
T	4800	2230	1580	5630
	5400	2430	1780	6230
	5700	2530	1880	6530
	5900	2597	1947	6730
	6300	2730	2080	7130
	7000	2963	2313	7830
	7500	3130	2480	8330
	8000	3297	2647	8830
	8500	3463	2813	9330
	9000	3785	3135	9830
	9500	3952	3302	10330
	10000	4118	3468	10830
	10500	4285	3635	11330
11000	4452	3802	11830	
11500	4618	3968	12330	

### Mast Performance and Capacity

- T Triplex PowerRamic mast
- 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)

- 1) Fork height is 50 mm or 60 mm higher, depending on lowered fork height (h13)
- 2) Including load backrest

Model	Battery Capacity (Ah)	Battery Weight (kg)	Ast <sup>6)</sup> (mm)	Ast3 <sup>4)</sup> (mm)	Ast <sup>5)</sup> (mm)	Ast3 <sup>4)</sup> (mm)	L4 (mm)	L2 (mm)	L1 <sup>3)</sup> (mm)	x (mm)
Line	6.4	6.5	4.33	4.33	4.34	4.34	4.28	4.20	4.19	1.8
NR14N	465	700	2684	2466	2750	2666	463	1254	2404	281
	620	900	2740	2538	2816	2738	391	1326	2476	209
	775	1100	2798	2610	2883	2810	319	1398	2548	137
NR14NH	620	900	2748	2548	2825	2748	382	1336	2486	199
	775	1100	2806	2620	2892	2820	310	1408	2558	127
NR16N	465	700	2693	2463	2751	2663	513	1254	2404	331
	620	900	2748	2535	2817	2735	441	1326	2476	259
	775	1100	2804	2607	2883	2807	369	1398	2548	187
NR16NH	620	900	2755	2545	2826	2745	432	1336	2486	249
	775	1100	2813	2617	2892	2817	360	1408	2558	177
NR16NS	465	700	2702	2459	2752	2659	563	1254	2404	381
	620	900	2755	2531	2817	2731	491	1326	2476	309
	775	1100	2811	2603	2883	2803	419	1398	2548	237
NR16NHS	620	900	2748	2548	2825	2748	382	1336	2486	199
	775	1100	2806	2620	2892	2820	310	1408	2558	127
NR16NC	465	700	2731	2502	2789	2702	510	1308	2458	327
	620	900	2800	2592	2872	2792	420	1398	2548	237
NR16NHC	620	900	2807	2602	2881	2802	410	1408	2558	228
NR20NH	620	900	2784	2536	2830	2736	582	1336	2486	399
	775	1100	2837	2608	2895	2808	510	1408	2558	327
	930	1300	2892	2680	2961	2880	438	1480	2630	255
NR25NH	620	900	2805	2560	2853	2760	572	1346	2496	389
	775	1100	2858	2632	2918	2832	500	1418	2568	317
	930	1300	2913	2704	2984	2904	428	1490	2640	245

- 3) With forklength 1150 mm
- 4) AST3 does not take the load diagonal into account. Only to be used for intrusive stacking
- 5) Ast according to VDI 2198 (800 x 1200mm) load lengthwise
- 6) Ast according to VDI 2198 (1000 x 1200mm) load crosswise

catliftruck@mcf.nl  
www.catliftruck.com

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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.

