

LI-ION
TECHNOLOGY

INNOVATIVE LITHIUM-ION

XC SERIES REACH TRUCK WITH LITHIUM POWER

with capacity of 1,400 to 2,500kg



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ISO14001:2015



ISO9001:2015



HANGCHA trucks conform
to the European Safety
Requirements.

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A NEW DIMENSION OF PERFORMANCE

XC SERIES REACH TRUCK WITH LITHIUM POWER

- / The XC series reach truck with lithium power fully utilize the advantages of lithium battery and achieve disruptive innovations in vehicle structure, functional configuration, performance parameters, ergonomics, and operating vision.
- / We cater for a wide range of applications whilst ensuring optimum energy efficiency. Regardless of your special requirements – whether confined spaces or lifting height reaches 13m, load capacity of up to 2,500 kg or individual customisation with various options – we have the truck you need.
- / Compact size of the lithium battery pack and breaking through the traditional structure design, makes the truck style more novel and more efficient.

MAXIMUM TRAVELLING SPEED

14km/h

MAXIMUM LOAD CAPACITY

2,500kg

MAXIMUM LIFTING SPEED

0.81m/s

MAXIMUM LIFT HEIGHT

13,000mm

HIGH RESIDUAL CAPACITY

6,500mm





BEING ENVIRONMENTALLY FRIENDLY, EFFICIENT AND DURABLE

- / CATL lithium battery is standard for all series, adopting 80V voltage system which can provides fast charging and long service life and less energy loss.
- / The special-shaped lithium battery pack design provides a large operating space in the cab and a broad view.



Charging port



Battery removal

⌚ Working time > 10h

⚡ Fast charging time ≤ 2h

Lithium battery capacity		
1.4 t	Std.	80V/250Ah
1.6 t		
1.8 t		
2.0 t		
2.5 t	Opt.	80V/404Ah

Note: Std. 80V/250Ah, Work time > 6h;
Opt. 80V/404Ah, Work time >10h



A NOVEL PROFILE STYLE AND COMPACT INTERIOR DESIGN

With fewer exposed fasteners of the inside covers, the interior is compact and stylish.

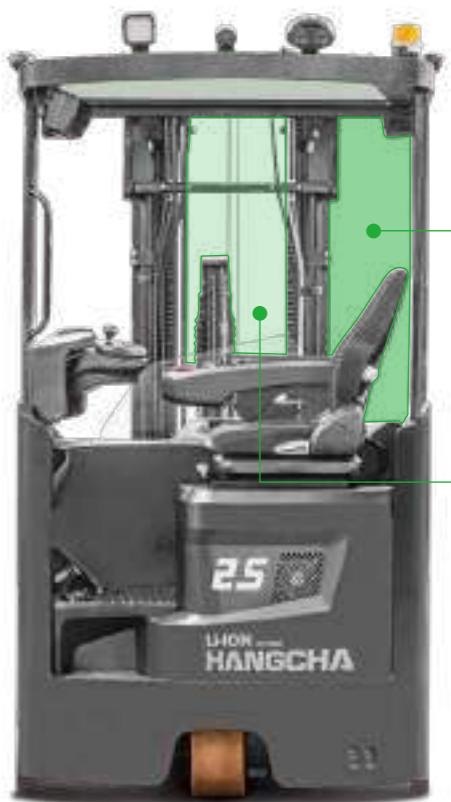
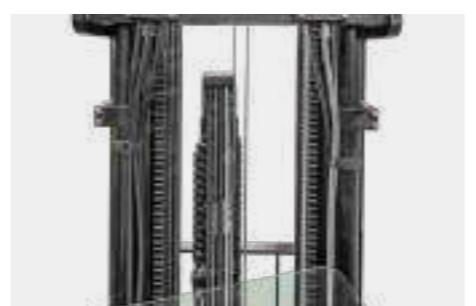


Thanks to the special-shaped design of the battery pack and the breakthrough in the body structure, which can provide a wider view.



The improved mast structure and piping arrangement enables a broader vision for stacking operations

/ The hydraulic tubing and the wires are on both sides of the mast, overlapping with the chain, making full use of the space and reducing the line of sight.



The compact mast design enables operator have a wider view around the outside of the mast.

The middle cylinder is arranged eccentrically to enable the driver to have a wider view around the inside of the mast.

EXCELLENT ERGONOMIC DESIGN



Steering wheel position can also be adjusted



The pedal height can be adjusted electrically

Integral suspended seat

Dashboard angle adjustment

Control with a fingertip switch

MULTIFUNCTIONAL INTERACTIVE COLOR-SCREEN INSTRUMENTS

The new multifunctional 4.3 inch color-screen instruments developed for the XC series reach truck have easier human-machine interfaces.



More status indication



1

1. Lifting height
2. Local time
3. Load weight

2

1. Driving mode
2. Fork action
3. Operating time
4. Maximum allowable lifting height

3

1. Steering mode
2. Battery power
3. Travelling speed

4

Various status signs and warning signs are displayed in a queue according to actual needs

More convenient shortcut button

Thanks to the integrated design of the instrument function buttons, the truck console saves a lot of physical buttons, making it more concise and efficient.



5

Height selection

6

Height limit

7

Lighting control

8

Battery removal

9

Optional function switching screen

10

↑ Button Driving mode switching

11

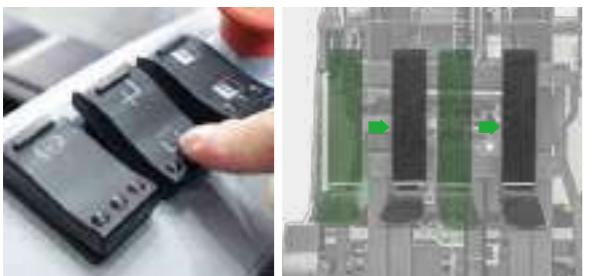
↓ Button Turtle speed mode

COMPREHENSIVELY IMPROVED FUNCTION CONFIGURATION



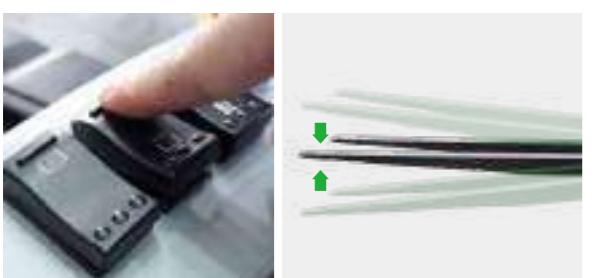
Height selection

Multiple heights can be pre-set on the instrument. After the function is enabled, when the fork is about to be lifted to the preset height, the lifting speed will gradually slow down and the fork will finally stop at the set height steadily.



Central sideshift

Simple, reliable and fast: The central positioning of the sideshift occurs automatically, eliminating the time-consuming, cautious approach of the required position. (Only for fingertip system)



Horizontal fork

Particularly at high lift heights, the forks' tilt position is often very hard to detect. The automatic horizontal positioning significantly simplifies and accelerates pallet entry. (Only for fingertip system)

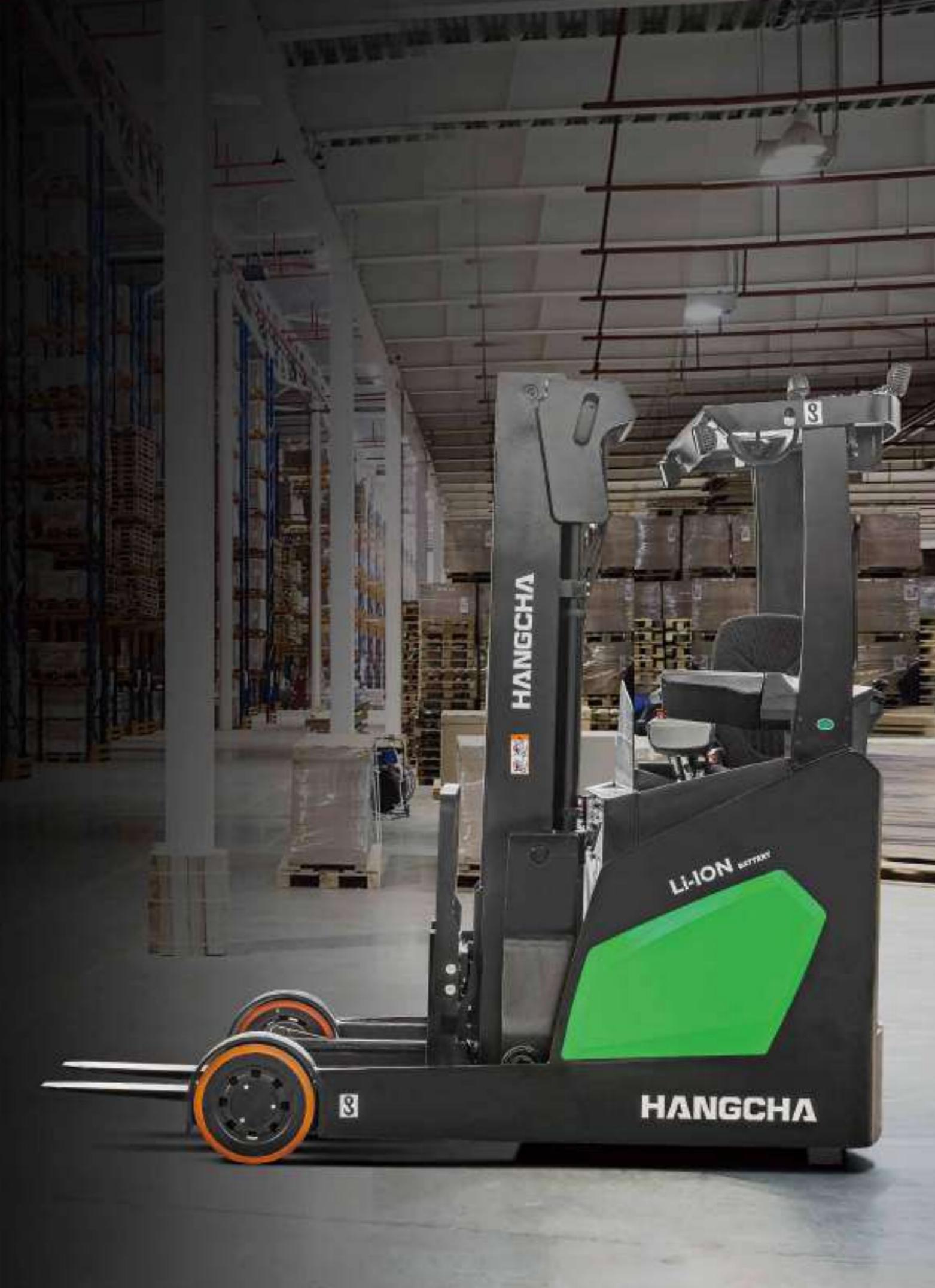


Height limit

After this function is enabled, when the fork is lifted to a certain height, this height will be set as the maximum allowable lifting height. Afterwards, whenever the fork is about to be lifted to this height, the lifting speed will gradually slow down and the fork will steadily finally stop at this height.



Faster, easier and safer stacking and retrieval operations



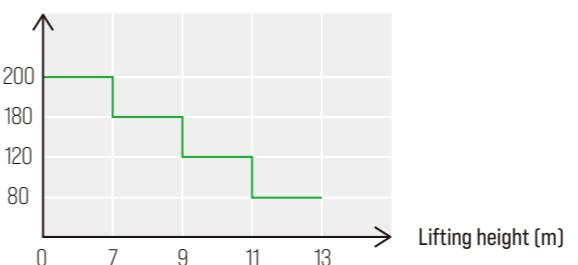


SAFETY FROM EVERY ANGLE

Drive control limit

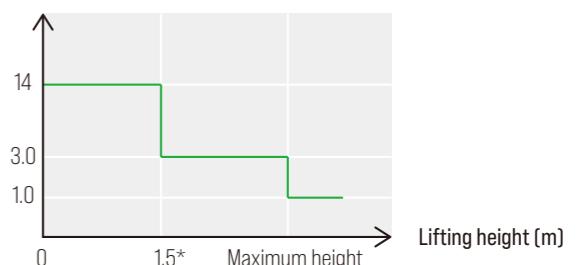
Drive control limits the travelling speed and traverse speed as soon as the forks are raised. This increases the safety when manoeuvring with a raised pallet in front of the storage rack, while still ensuring more sensitive manoeuvring during the work cycle.

Traverse speeds
(mm/s)

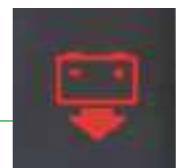


Note: The above table is only for 2.0/2.5t, the parameters of other models are not the same.

Travelling speed
(km/h)



*: 1.5m is only for the fingertip system.
The parameter of mechanical control system is the height of free lift.



The battery is in an inappropriate position and the indicator light is lit

Battery lock with creep speed interlock

Installed on the battery latch in the motor compartment. Monitors the locking of the battery pack. If the battery pack is not retracted or not locked, travel is restricted to creep speed.



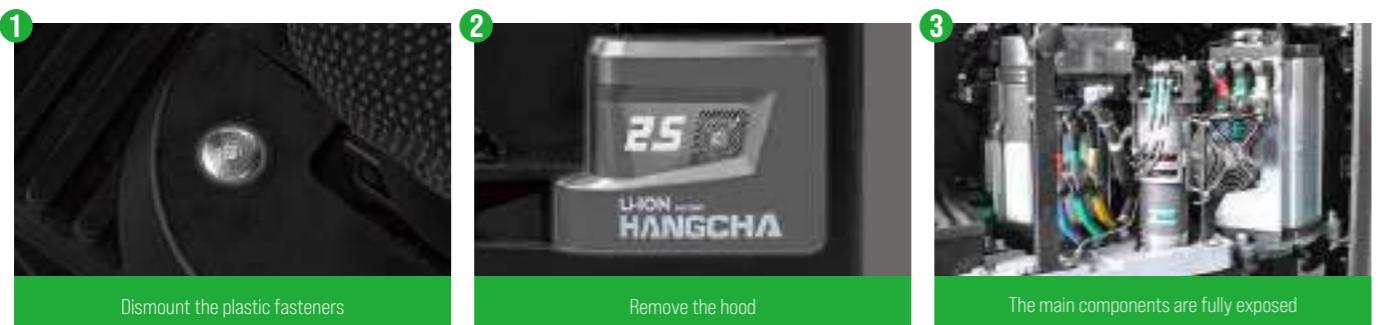
EASY MAINTENANCE

The battery pack can be replaced quickly. The driver can unlock and remove the battery while sitting on his seat.

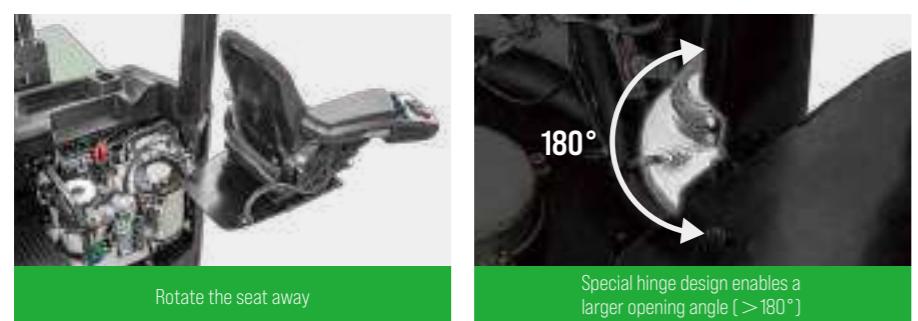
Remove battery pack step



The hood can be easily dismounted and mounted to facilitate routine maintenance operations.



The seat can be turned open at a large angle, which is convenient for maintenance work.



XC Series Reach Truck With Lithium Power Specification

	HANGCHA GROUP CO.,LTD.					
	1.1	Manufacturer				
1.2	Model		CQD14-XC5-SI★ CQD14-XC50-SI*	CQD16-XC5-SI★ CQD16-XC50-SI*	CQD18-XC5-SI★ CQD18-XC50-SI*	CQD20-XC5-SI★ CQD20-XC50-SI*
1.3	Power unit		Li-ION battery	Li-ION battery	Li-ION battery	Li-ION battery
1.4	Manual		Seated	Seated	Seated	Seated
1.5	Rated capacity/rated load	Q(t)	1.4	1.6	1.8	2
1.6	Load centre distance	c(mm)	600	600	600	600
1.8	Load distance	x(mm)	360 ^{17/11}	410 ^{17/11}	385 ⁸	362 ²⁰
1.8.1	Load distance, mast reached forward	x1(mm)	211 ²	211 ²	203	232
1.9	Wheelbase	y(mm)	1355	1405	1405	1471
2.1	Net weight incl. battery (see row 6.5)	[kg]	3330	3370	3370	3470
3.1	Tyres		PU	PU	PU	PU
3.2	Tyre size, front		φ343×140	φ343×140	φ343×140	φ400×160
3.3	Tyre size, rear		φ285×100	φ285×100	φ285×100	φ343×108
3.5	Wheels, number front/rear (x = driven wheels)		1x/2	1x/2	1x/2	1x/2
3.7	Tread width, rear	b1(mm)	1174	1174	1174	1162
4.1	Tilt of fork carriage forward/backward	α/β(°)	2.0/5.0	2.0/5.0	2.0/5.0	2.0/5.0
4.2	Height, mast lowered	h1(mm)	2100	2100	2100	2100
4.3	Free lift	h2(mm)	105	105	110	110
4.4	Lift	h3(mm)	3000	3000	3000	3000
4.5	Height, mast extended	h4(mm)	3965	3965	3965	3965
4.7	Height of overhead guard	h5(mm)	2263	2263	2263	2263
4.8	Seat height	h7(mm)	1159	1159	1159	1159
4.10	Height of support arms	h8(mm)	308	308	308	365.5
4.19	Overall length	l1(mm)	2400 ^{38/12}	2400 ^{38/12}	2425 ¹⁷	2514 ²¹
4.20	Length to face of forks	l2(mm)	1250 ^{38/12}	1250 ^{38/12}	1275 ¹⁷	1364 ²¹
4.21	Overall width	b1/b2(mm)	1270/1270	1270/1270	1270/1270	1270/1270
4.22	Fork dimensions	s/e/l(mm)	35×120×1150	35×120×1150	40×122×1150	40×122×1150
4.23	Fork carriage ISO 2328, class/type A, B		II A	II A	II A	II A
4.24	Fork-carriage width	b3(mm)	830	830	830	830
4.25	Distance between fork-arms	b5(mm)	750	750	750	750
4.26	Distance between wheel arms	b4(mm)	940	940	940	940
4.28	Reach distance	l4(mm)	571 ^{47/13}	621 ^{47/13}	588 ⁸	594 ²⁰
4.32	Ground clearance, centre of wheelbase	m2(mm)	80	80	80	80
4.33	Aisle width for pallets 1000 × 1200 sideways	Ast(mm)	2687 ^{59/14}	2701 ^{59/14}	2719 ¹⁸	2802 ²²
4.34	Aisle width for pallets 800 × 1200 lengthways	Ast(mm)	2740 ^{610/15}	2745 ^{610/15}	2768 ¹⁹	2855 ²³
4.35	Turning radius	Wa(mm)	1610	1660	1660	1726
4.37	Length over the support arms	l7(mm)	1775	1825	1825	1920
5.1	Travel speed, laden/unladen	(km/h)	14/14	14/14	14/14	14/14
5.2	Lift speed, laden/unladen	(m/s)	0.61/0.81	0.59/0.81	0.5/0.7	0.48/0.7
5.3	Lowering speed, laden/unladen	(m/s)	XC4:0.52/0.52 XC4:0.56/0.56	XC4:0.52/0.52 XC4:0.56/0.56	XC4:0.52/0.52 XC4:0.56/0.56	XC4:0.52/0.52 XC4:0.56/0.56
5.4	Traverse speed w. / w.o. load	(m/s)	0.24/0.24	0.24/0.24	0.2/0.2	0.2/0.2
5.8	Max. gradeability, laden/unladen 5min	(%)	10.0/15.0	10.0/15.0	10.0/15.0	10.0/15.0
5.10	Service brake		Electromagnetic	Electromagnetic+Mech.	Electromagnetic+Mech.	Electromagnetic+Mech.
6.1	Drive motor rating S2 60 min.	[kW]	8.1	8.1	8.1	8.1
6.2	Lift motor rating at S3 15%	[kW]	20	20	20	20
6.3	Battery as per DIN 43531 /35/36 A, B, C, no		no	no	no	no
6.4	Battery voltage, nominal capacity	[V/Ah]	80/250	80/250	80/250	80/250
6.4.1	Battery voltage, rated capacity, Optional	[V/Ah]	80/404	80/404	80/404	80/404
6.5	Battery weight (±5%)	[kg]	275	275	275	360
10.1	Operating pressure for attachments	[bar]	150	150	150	150
10.2	Oil flow for attachments	[l/min]	18	18	18	18
10.7	Sound pressure level LpA _Z (at the driver's seat)	[db(A)]	68	68	68	68

Note: 1) h3>7000mm:-25mm. 2) h3>7000mm:-8mm. 3) h3>7000mm:+25mm. 4) h3>7000mm:-33mm. 5) h3>7000mm:+19mm. 6) h3>7000mm:+23mm. 7) With optional battery 80V/404Ah,h3≤7000mm:-90mm.

8) With optional battery 80V/404Ah, h3≤7000mm:+90mm. 9) With optional battery 80V/404Ah, h3≤7000mm:+68mm. 10) With optional battery 80V/404Ah, h3≤7000mm:+82mm. 11) With optional battery 80V/404Ah, h3>7000mm:-115mm.

12) With optional battery 80V/404Ah, h3>7000mm:+115mm. 13) With optional battery 80V/404Ah, h3>7000mm:-123mm. 14) With optional battery 80V/404Ah, h3>7000mm:+87mm. 15) With optional battery 80V/404Ah, h3>7000mm:+105mm.

16) With optional battery 80V/404Ah:+90mm. 17) With optional battery 80V/404Ah:+90mm. 18) With optional battery 80V/404Ah:+67mm. 19) With optional battery 80V/404Ah:+81mm. 20) h3≥12000mm:+150mm. 21) h3≥12000mm:+150mm;

22) h3≥12000mm:+15mm. 23) h3≥12000mm:+137mm. 24) h3≥12000mm:+105mm. 25) h3≥12000mm:+134mm;

★ CE model

Features

NO.	System	Features	CQD14/16/18/20/25-XC5-SI*	CQD14/16/18/20/25-XC50-SI*
1	Control	Control with a mechanical control lever	●	/
2		Control with a fingertip switch	/	●
3		Height display	○ [Only for triplex mast, excluding the free lift range]	● [Including the free lift range]
4		Height selection	○ [Only for triplex mast, excluding the free lift range]	● [Including the free lift range]
5		Height limit	○ [Only for triplex mast, excluding the free lift range]	● [Including the free lift range]
6		Central sideshift	/	○
7		Horizontal fork alignment	/	○
8		Mast reach damping system	●	●
9		Electric lowering limit - Stop forks above outriggers if mast is retracted	○	○
10		Soft landing system	/	○
11		Lifting damping system	●	●
12		Drive control limit	●	●
13		Drive wheel skid control system	○	○
14		Battery lock with creep speed interlock	●	●
15		Travelling speed control at corner	●	●
16		180° steering mode	●	●
17		360° steering mode	○	○
18	Transmission system	ZF transmission	●	●
19		USB power socket	●	●
20		Fork positioning laser	○	○
21		Video monitoring	○	○
22		Keyed start	●	●
23		Start with a PIN code or by a card	○	○
24		Beep	○	○
25		Operating light (in the direction of the fork)	●	●
26		Operating light (in the reverse direction of the fork)	○	○
27		Alarm light	●	●
28	Electronic accessories	Blue light	○	○
29		Three-sided one line laser projection light	○	○
30		Electrical adjustment of pedal height	○	○
31		Adjustable steering wheel	●	●
32		Instrument angle adjustment	●	●
33	Fault Diagnosis	Suctioned oil filter clogging alarm	○	○
34		Backflow oil filter clogging alarm	○	●
35	Seat	Sequential Seat Belt Interlock System	●	●
36		BF6-3 suspension seat	●	/
37		MSG65/522 suspension seat	○	●
38		Panorama roof	○	○
39		PVC ceiling	○	○
40		Curved rearview mirror	○	○
41		Left and right rear view mirrors	○	○
42		Cold storage	○	○
43		Load backrest	●	●
44		Fire extinguisher	○	○
45		Electric fan	○	○
46		DPS system	●	●

Note: ● Standard; ○ Optional

★ CE model

1.4/1.6t Mast Specification

Type	Lifting height h ₃	Mast lowered h ₁	Mast extended h ₄	Free lifting height h ₂	Tilting range α/β
	mm	mm	mm	mm	(°)
Wide view duplex mast	2700	1950	3665	105	2/5
	3000	2100	3965	105	2/5
	3300	2250	4265	105	2/5
	3500	2350	4465	105	2/5
	3600	2400	4565	105	2/5
	4000	2650	4965	105	2/5
	4300	2790	5265	105	2/5
	4500	2900	5465	105	2/5
	4800	3095	5765	105	2/5
	5000	3195	5965	105	2/5
Full free triple mast	4000	2030	4965	105	2/5
	4500	2160	5465	115	2/5
	5000	2300	5965	135	2/5
	5500	2450	6465	1485	2/5
	6000	2625	6965	1660	2/5
	6500	2800	7465	1835	2/5
	7000	3000	7965	2035	2/5
	7500	3060	8465	2095	2/5
	8000	3250	8965	2285	2/5
	8500	3420	9465	2455	2/5
	9000	3580	9965	2615	2/5
	9500	3760	10465	2795	2/5
	10000	3920	10965	2965	2/5
	10500	4100	11465	3135	2/5
	11000	4300	11965	3335	2/5

2.0t Mast Specification

Type	Lifting height h ₃	Mast lowered h ₁	Mast extended h ₄	Free lifting height h ₂	Tilting range α/β
	mm	mm	mm	mm	(°)
Wide view duplex mast	2700	1950	3665	110	2/5
	3000	2100	3965	110	2/5
	3300	2250	4265	110	2/5
	3500	2350	4465	110	2/5
	3600	2400	4565	110	2/5
	4000	2650	4965	110	2/5
	4300	2790	5265	110	2/5
	4500	2900	5465	110	2/5
	4800	3095	5765	110	2/5
	5000	3195	5965	110	2/5
Full free triple mast	4000	2085	4965	120	2/5
	4500	2165	5465	120	2/5
	5000	2315	5965	1350	2/5
	5500	2490	6465	1525	2/5
	6000	2665	6965	1700	2/5
	6500	2835	7465	1870	2/5
	7000	3020	7965	2055	2/5
	7500	3180	8465	2215	2/5
	8000	3350	8965	2385	2/5
	8500	3580	9465	2615	2/5
	9000	3800	9965	2835	2/5
	9500	3970	10465	3005	2/5
	10000	4100	10965	3135	2/5
	10500	4250	11465	3285	2/5
	11000	4450	11965	3485	2/5
	11500	4700	12465	3735	2/5
	12000*	4900	12965	3935	2/5
	12500*	5150	13465	4165	2/5
	13000*	5400	13965	4435	2/5

* When you choose the mast, the dimensions of the truck will be affected. Please refer to the performance parameter table for details.

1.8t Mast Specification

Type	Lifting height h ₃	Mast lowered h ₁	Mast extended h ₄	Free lifting height h ₂	Tilting range α/β
	mm	mm	mm	mm	(°)
Wide view duplex mast	2700	1950	3665	110	2/5
	3000	2100	3965	105	2/5
	3300	2250	4265	105	2/5
	3500	2350	4465	105	2/5
	3600	2400	4565	105	2/5
	4000	2650	4965	105	2/5
	4300	2790	5265	105	2/5
	4500	2900	5465	105	2/5
	4800	3095	5765	105	2/5
	5000	3195	5965	105	2/5
Full free triple mast	4000	2085	4965	110	2/5
	4500	2165	5465	120	2/5
	5000	2315	5965	1350	2/5
	5500	2490	6465	1525	2/5
	6000	2665	6965	1700	2/5
	6500	2835	7465	1870	2/5
	7000	3020	7965	2055	2/5
	7500	3180	8465	2215	2/5
	8000	3350	8965	2385	2/5
	8500	3580	9465	2615	2/5
	9000	3800	9965	2835	2/5
	9500	3970	10465	3005	2/5
	10000	4100	10965	3135	2/5
	10500	4250	11465	3285	2/5
	11000	4450	11965	3485	2/5
	11500	4700	12465	3735	2/5
	12000*	4900	12965	3935	2/5
	12500*	5150	13465	4165	2/5
	13000*	5400	13965	4435	2/5

1.4t Residual Load Capacity Chart

Capacity(kg)	Load center distance(mm)						
	600	700	800	900	1000	1100	1200
≤6000	1400	1210	1070	920	780	660	550
6500	1300	1120	990	840	720	610	510
7000	1200	1030	910	770	650	540	430
7500	1100	940	830	700	580	470	370
8000	1050	900	790	660	550	440	350
8500	1000	850	750	620	510	410	320
9000	900	770	670	550	450	350	260
9500	800	700	600	480	380	290	200
10000	700	600	500	400	310	230	150
10500	550	450	390	300	210	130	60
11000	350	280	230	150	80	10	0

1.8t Residual Load Capacity Chart

Capacity(kg)	Load center distance(mm)						
600	700	800	900	1000	1100	1200	
</tr