



X SERIES ELECTRIC SIT-ON REACH TRUCK
RT16 / RT20 / RT25

Load capacity: 1,600 kg / 2,000 kg / 2,500 kg



Overview

Designed for high-density storage, it offers efficient maneuverability and efficiency in narrow aisles. Suitable for high-level rack warehousing, cold chain/pharmaceutical storage, logistics distribution centers, production line handling, e-commerce, and 3PL operations. The X Series delivers greater productivity and enhanced operator comfort for most challenging jobsites.



Efficiency

■ AC Motor & Digital Control Efficiency

- The combination of AC drive and lift motors with an advanced digital controller ensures optimal performance matching and high energy efficiency.

■ High-Efficiency Working Speeds

- Maximum travel speed reaches up to 14 km/h, and maximum mast lifting speed reaches 0.45 m/s.

■ Energy Regeneration

- Features a regenerative braking function that recovers energy during deceleration, significantly extending battery autonomy.



■ Precision Control

- Standard Mini Lever, integrated sideshift, and a fork height positioning system allow for easily and accurately, greatly speeding up work.



■ Flexible Battery Solutions

- Lead-acid battery standard with a side-changed for convenient replacement and maintenance. High-performance Lithium batteries are optional, featuring a side-charging port for opportunity charging—fast, convenient, and available on-demand.



Reliability & Safety

■ Robust Structure & High IP grade Protection

- The heavy-duty chassis and rigid mast construction ensure an extended service life and superior structural stability. Key electrical components, including motors and electronic controllers designed with High IP grade Protection to guarantee reliable operation under harsh working conditions.

■ Triple Braking System

- Equips a comprehensive triple-braking system: hydraulic load-wheel braking, regenerative braking, and electromagnetic parking brake. Service braking combines hydraulic and regenerative actions for short stopping distances without inertial shock. The electromagnetic parking brake engages automatically stopping, Prevent truck from rolling down on the slope.



■ Enhanced Visibility & Quad-Cushioning



- The offset mast assembly offers an excellent forward view. Standard features include an integrated sideshifter, fork tilting, and a "Mast buffering" system (mast reach in-out buffering, mast staging cushioning, Lifting end buffering, and forks soft-landing) to protect fragile cargo and ensure safe operation.

■ Intelligent Safety Assistance

- **Active Stability Control (ASC) System (Optional)**
 - Minimizes truck swaying and vibrations during mast lifting or reaching, enhancing high-level operating precision.

• Curve Speed Control (Standard):

- Automatically decelerates the truck during cornering based on the steering angle to prevent tip-over risks.

■ Advanced Diagnostics

- CAN-bus communication technology, the system monitors motor speed, temperature, and vital parameters in real-time to achieve precise closed-loop control.

Serviceability

■ Conveniently -Access Maintenance

- The integrated seat support design can be fully pulled open to the side, giving a clear view of all electrical controls, motors, hydraulic units, drive and brake systems — making maintenance quick and easy.



■ Real-Time Diagnostics & Intelligent CAN-bus

- The intelligent onboard monitoring system continuously checks the truck's status in real-time and reports error code information instantly via the display, enabling quickly troubleshooting. The CAN-bus simplifies electrical wiring, reduces connection failures, and streamlines fault diagnosis.

■ Battery Maintenance Made Easy

- The battery can be moved out horizontally together with the mast reach out, supported by the standard side-extraction mechanism, streamlining daily inspection, watering, or replacement.

Ergonomics



Versatile Steering Modes

- The 180°/360° steering mode can be changed via display, perfectly adapting to different application requirements and habits.

Easy Cabin Access

- A two-level step and a handle design for 3-point access allow the driver to mount and dismount the truck safely and effortlessly.

Excellent -Style Controls

- 3-pedal layout (Safety Pedal, Brake Pedal, and Accelerator Pedal) contributes to load handling and excellent driving control. An adjustable steering column and adjustable suspension seat (equipped with a standard seat switch for safety) reduce physical fatigue and allow drivers to find their natural posture.

Premium Operator Interface

- Features a large 9-inch color touchscreen display. This large LCD provides clear, comprehensive, and easy-to-read truck to the operator. Keyless one-touch start combined with password PIN-code login offers enhanced convenience and authorized security access.

Driver Comfort & Amenities

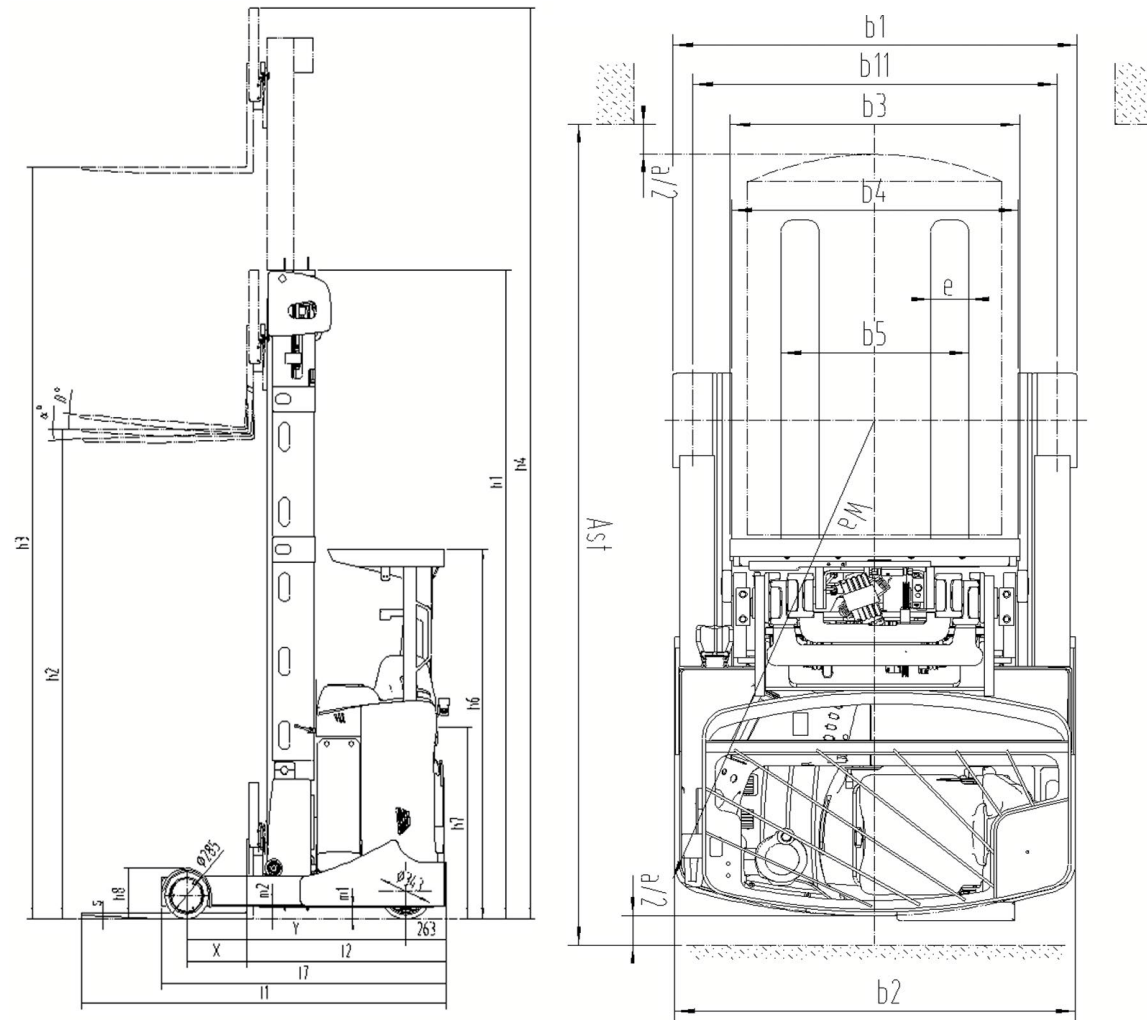
- Ergonomic mini lever places all mast controls within arm's reach for relaxed operation. An onboard USB charger is conveniently integrated for charging mobile phones and other electronic devices. Standard Electric Power Steering (EPS) with automatic wheel centering facilitates agile turning for truck conveniently used.



RT16-25 Specification

Distinguishing mark	1.2	Manufacturer's type designation		RT16-MZX	RT20-MZX	RT25-MZX
	1.3	Power unit		Battery	Battery	Battery
	1.4	Operator type:hand,pedestrian,standing,seated,order-picker		Seated	Seated	Seated
	1.5	Rated capacity/Ratedload	Q (kg)	1600	2000	2500
	1.6	Load centre distance	c (mm)	600	600	600
	1.8	Load distance,centre of drive axle to fork	x (mm)	391	377	378
	1.9	Wheelbase	y (mm)	1420	1510	1650
	2.1	Service weight	kg	4250	3605	5590
	2.2	Axle loading,fork advanced,unladen,driver/load	kg	1700/2570	1435/2170	2850/3180
Weight	2.3	Axle loading,fork retracted,unladen,driver/load	kg	2590/1670	2245/1360	2350/3750
	2.4	Axle loading,fork advanced,laden,driver/load	kg	710/5200	727/4878	1150/6950
	2.5	Axle loading,fork retracted,laden,driver/load	kg	2390/3520	2030/3575	2850/5330
	3.1	Tyres:driver/load		Polyurethane	Polyurethane	Polyurethane
	3.2	Tyres size,driver	mm	Φ343×140	Φ343×140	Φ343×140
Tyres / chassis	3.3	Tyres size,load	mm	Φ285×100	Φ343×114	Φ343×140
	3.5	Wheels number,front/rear(x=driven wheels)		1x/2	1x/2	1x/2
	3.7	Tread,load	b11 (mm)	1146	1146	1195
	3.7	Tread,load	b11 (mm)	1146	1146	1195
Dimensions	4.1	Tilt of mast/fork carriage,forward/backward	a/b (°)	2/4	2/4	2/4
	4.2	Height of mast,lowered	h1 (mm)	2340	2340	2340
	4.3	Free lift	h2 (mm)	1345	1400	1400
	4.4	Lift	h3 (mm)	5000	5000	5000
	4.5	Height,mast extended	h4 (mm)	5965	5940	5940
	4.7	Height of overhead guard(cabin)	h6 (mm)	2210	2210	2210
	4.19	Overall length	l1 (mm)	2362	2466	2610
	4.20	Length to face of fork	l2 (mm)	1292	1396	1536
	4.21	Overall width	b1/b2 (mm)	1270/1260	1270/1260	1345/1260
	4.22	Fork dimensions DIN ISO 2331	s / e / l (mm)	40/120/1070	40/120/1070	45/125/1070
	4.23	Fork carriage DIN 15 173,class/type A,B		2B	2B	2B
	4.24	Fork carriage width	b3 (mm)	911	928	928
	4.25	Distance between fork-arms min/max	b5 (mm)	748	708	330/688
	4.26	Distance between wheel-arms/loading surfaces	b4 (mm)	900	900	900
	4.28	Reach distance	l4 (mm)	585	600	600
	4.31	Ground clearance,laden,below mast	m1 (mm)	88	80	70
	4.34.1	Aisle width for pallets 1000mmx1200mm crossways	Ast (mm)	2740	2849	2980
	4.34.2	Aisle width for pallets 800mmx1200mm Lengthwise	Ast (mm)	2780	2899	3025
	4.35	Turning radius	Wa (mm)	1683	1783	1920
	4.37	Length across wheel arms	l7 (mm)	1843	1960	2100
Performance data	5.1	Travel speed,laden/unladen	km/h	14/14	10.5/11	10/12
	5.2	Lift speed,laden/unladen	m/s	0.29/0.45 (0.40/0.45)	0.29/0.45 (0.35/0.45)	0.35/0.58
	5.3	Lowering speed,laden/unladen	m/s	0.55/0.50	0.5/0.5	0.45/0.45
	5.4	Reaching speed,laden/unladen	m/s	0.12/0.12	0.12/0.12	0.12/0.12
	5.8	Gradeability,laden/unladen	%	10/10	10/10	10/11
	5.10	Service brae		Electric	Electric	Electric
Combustion -engine	6.1	Drive motor,S2 60 minute rating	kW	6.5(AC)	6.5(AC)	6.5(AC)
	6.2	Lift motor,S3 15% rating	kW	8.2/(12)(AC)	8.2/(12)(AC)	15(AC)
	6.4	Battery voltage/nominal capacity K5	(V)/(Ah) or kWh	48/420	48/500	48/700
	6.5	Battery weight	kg	650	870	1000
	10.7	Sound pressure level at the driver's seat	dB (A)	65	65	69.7

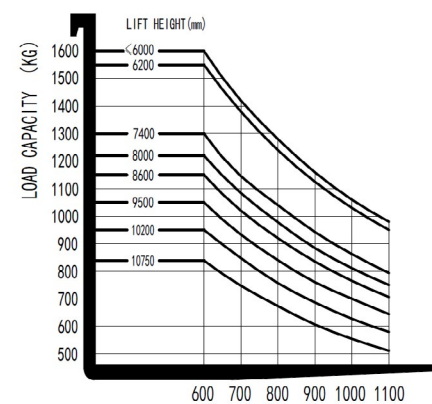
■ TRUCK DIMENSION DIAGRAM



■ Load Capacity Chart

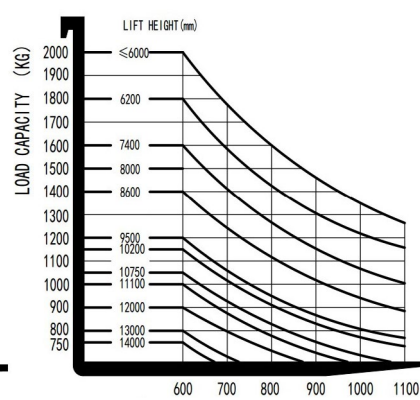
- **RT16-MZX**

LIFTING HEIGHT - LOAD



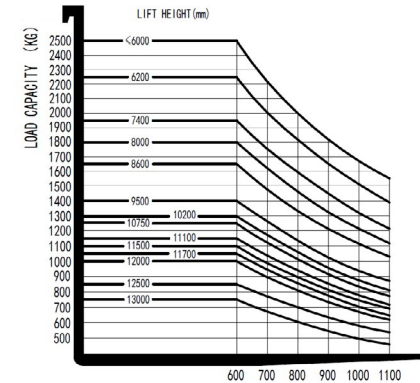
- **RT20-MZX**

LIFTING HEIGHT - LOAD



- **RT25-MZX**

LIFTING HEIGHT - LOAD



■ **RT16-MZX**

Lift	h3(mm)	5000	5500	6200	7000	7400	8000	8600	9000	9500	10200	10750	10750
Lift capacity	kg	1600	1600	1550	1380	1300	1220	1150	1100	1050	950	840	840
Height of mast,lowered	h1(mm)	2340	2400	2740	3007	3190	3390	3590	3724	3890	4190	4375	4375
Free lift (with load backrest)	h2(mm)	1345	1405	1745	2012	2195	2395	2595	2729	2895	3195	3380	3380
Free lift (without load backrest)	h2(mm)	1736	1803	2036	2303	2536	2736	2936	3070	3236	3516	3700	3700
Height,mast extended (with load backrest)	h4(mm)	5965	6465	7165	7965	8365	8965	9565	9965	10465	11165	11715	11715

■ **RT20-MZX**

Lift	h3(mm)	5000	5500	6200	7000	7400	8000	8600	9000	9500	10200	11100	12000	12500
Lift capacity	kg	2000	2000	1800	1700	1600	1500	1400	1300	1200	1150	1000	900	850
Height of mast,lowered	h1(mm)	2340	2507	2740	3010	3190	3390	3590	3724	3890	4190	4490	4790	4956
Free lift (with load backrest)	h2(mm)	1400	1567	1800	2070	2250	2450	2650	2784	2950	3250	3550	3850	4016
Free lift (without load backrest)	h2(mm)	1736	1902	2136	2406	2536	2736	2936	3068	3236	3600	3900	4200	4366
Height,mast extended (with load backrest)	h4(mm)	5940	6440	7140	7940	8340	8940	9540	9940	10440	11140	12040	12940	13440

■ **RT25-MZX**

Lift	h3(mm)	5000	5500	6200	7000	7400	8000	8600	9000	9500	10200	11700	12500	13200
Lift capacity	kg	2500	2500	2250	2050	1950	1800	1650	1500	1400	1300	1050	850	710
Height of mast,lowered	h1(mm)	2340	2507	2740	3010	3190	3390	3590	3724	3890	4220	4720	4990	5257
Free lift (with load backrest)	h2(mm)	1400	1567	1800	2070	2250	2450	2650	2784	2950	3283	3783	4053	4320
Free lift (without load backrest)	h2(mm)	1736	1902	2136	2406	2536	2736	2936	3068	3236	3600	4100	4368	4602
Height,mast extended (with load backrest)	h4(mm)	5940	6440	7140	7940	8340	8940	9540	9940	10440	11140	12640	13440	14140

Maximal RT16/20/25 CONFIGURATION

PERFORMANCE	STD	OPT
Driving Motor 6.5kw/ Lifting Motor 8.2kw/15Kw	●	
Big power motor with quick lift for 1.6/2.0t		●
Lead-Acid Battery	●	
Lithium battery		●
High-performance charger	●	
Digital Controller	●	
Cold Store Protect FOR TRUCK-25°C		●
DRIVE	STD	OPT
PU Drive Wheel / PU Load Wheel	●	
Speed limited (Four-speed 7/8/9/10km/h limit set on display)	●	
Load wheel brake	●	
Safety Pedal	●	
Auto-parking brake	●	
Speed Limit when Mast is raised		●
Speed reduce when turning	●	
LIFT	STD	OPT
3 stage limited freelif mast	●	
2° forward /4° back tilt	●	
HANDLING	STD	OPT
Mini Lever	●	
Manual Multi-way valve control (only for 2t truck)		●
Selection of alternative fork lengths		●
Height positioning system	●	
High select system	●	
Camera system (Wired /Wireless)		●
Integrate Side shifter	●	
Load Backrest	●	
Mast buffering (Landing/Lifting end/Stage/Reach in-out)	●	
Mast lifting with reach in-out	●	
Forklift scale (only for 2t truck)		●
ASC Stabilization system		●
ERGONOMICS	STD	OPT
Overhead guard	●	
Top Screen PE		●

ERGONOMICS	STD	OPT
Electrical power steering	●	
180 Degree steering	●	
360 Degree steering		●
USB Charger 5V 2.1A/1A	●	
Password start	●	
Cup Holder	●	
Operator fan		●
Piping for Water Refill for Lead-Acid battery		●
Lateral battery Change std for lead-acid battery	●	
Lateral battery Change option for lithium battery		●
Suspended seat with Seat switch with armrest	●	
High backrest woven seat (without armrests, with seat switch)		●
Safety Belt		●
Multifunction color display panel	●	
Adjustable steering column	●	
VISIBILITY	STD	OPT
Internal Mirror Panorama	●	
LED Work Light, pair for Front		●
LED Work Light, One piece for rear		●
Flashing Beacon	●	
Buzzer leading forks	●	
Blue spot lights		●
Red light (left, right)		●
OPERATION	STD	OPT
Horn		●
Seatbelt interlock for truck start and truck operation		●
APPEARANCE	STD	OPT
Maximal Red&Black	●	
Maximal White&Black - Lithium Version		●
SUPPLEMENTAL	STD	OPT
CE Requirement		●
Literature package	●	
Operator’s manual	●	
Warranty: Whole truck 14 Months / 2,000 hours parts manufacturer’s warranty; Lithium battery: 5 years/10000hrs warranty	●	



CE



ISO 14001



ISO 9001

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