



UN FORKLIFT

# FE SERIES

3-WHEEL  
ELECTRIC FORKLIFT  
(LEAD ACID & LI-ION BATTERY)

CAPACITY 1.6-2.0 TON



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CAPACITY 1.6-2.0 TON

# FE SERIES | 3-WHEEL ELECTRIC FORKLIFT

FE Series 3-wheel electric forklift (Capacity:1.6-2.0T) is a fully upgraded model developed on the basis of the original V Series. This series is a compact forklift designed for simple & straightforward applications, offering easy maneuverability in narrow aisles and confined spaces.



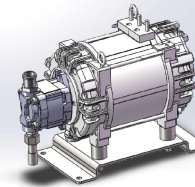
## HIGH PERFORMANCE



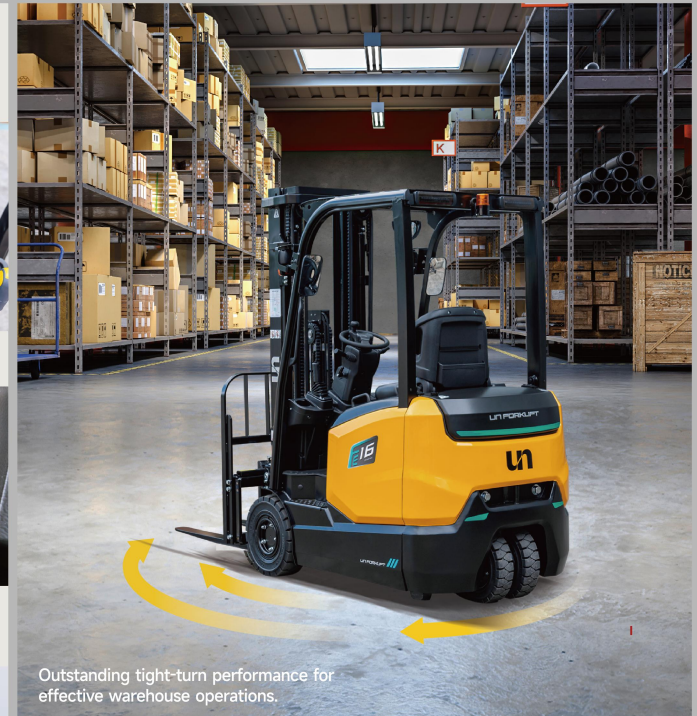
Featuring a load-sensing steering gear, increasing the lift speed.



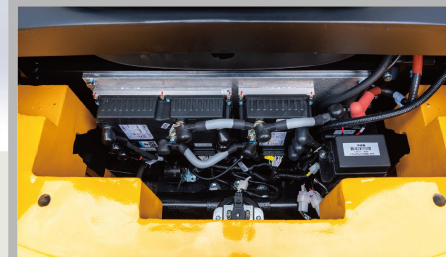
Multiple speed modes can be freely selected based on working conditions, enhancing efficiency.



Equipped with a high-power hydraulic pump motor & a low-noise, high-displacement pump, significantly enhances lifting speed.



Outstanding tight-turn performance for effective warehouse operations.



ZAPI controller utilizes high-frequency MOSFET integrated control mode ensures precise and smooth control.

AC controller enables computer-controlled operations for driving, steering, lifting, and tilting of the forklift.

## LEAD-ACID & LITHIUM BATTERY SOLUTIONS

### LEAD-ACID

- Proven Reliability
- Cost-Effective
- Easy Maintenance
- Suitable for Multi-Shift Operations



### LITHIUM BATTERY

- High Efficiency & Fast Charging
- Longer Lifespan
- Maintenance-Free
- Energy-Saving & Eco-Friendly



## BATTERY & CHARGER

Model	capacity	Charger	Model	capacity	Charger
Lead Acid			Li-ion		
FBT16-FE1NQZC	48V/460AH	48V/60A REMA Plug	FBT16-FE2NLZC	80V/150AH	80V/65A REMA Plug
	48V/500AH	48V/70A REMA Plug		80V/230AH	80V/100A REMA Plug
	48V/600AH	48V/80A REMA Plug		80V/346AH	80V/100A REMA Plug
FBT18-FE1NQZC	48V/700AH	48V/100A REMA Plug	FBT18-FE2NLZC	80V/460AH	80V/200A REMA Plug
	48V/460AH	48V/60A REMA Plug		80V/150AH	80V/65A REMA Plug
	48V/500AH	48V/70A REMA Plug		80V/230AH	80V/100A REMA Plug
FBT20-FE1NQZC	48V/600AH	48V/80A REMA Plug	FBT20-FE2NLZC	80V/346AH	80V/100A REMA Plug
	48V/700AH	48V/100A REMA Plug		80V/460AH	80V/200A REMA Plug
	48V/540AH	48V/70A REMA Plug		80V/150AH	80V/65A REMA Plug
	48V/600AH	48V/80A REMA Plug		80V/230AH	80V/100A REMA Plug
	48V/700AH	48V/100A REMA Plug		80V/346AH	80V/100A REMA Plug
				80V/460AH	80V/200A REMA Plug

## SAFETY & RELIABILITY

Standard equipped with proportional lifting function allowing for precise lifting of the cargo.



Robust Stamped OHG.



The traveling braking system features hydraulic braking combined with wet braking, providing dual-layer protection.



The standard turning speed deceleration function reduces the risk of tipping over in corners.



Dual drive motors deliver powerful performance, ensuring safety and reliability.

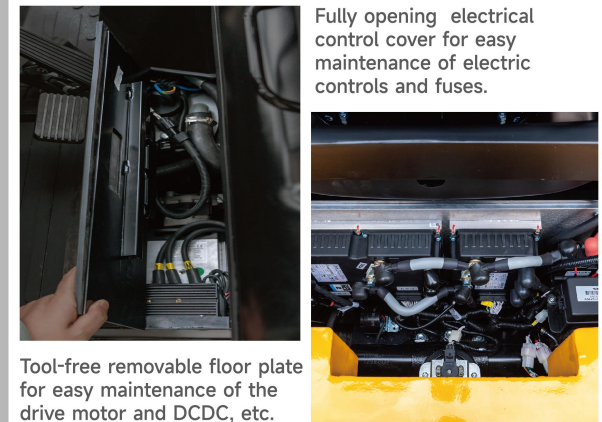
## EASY MAINTENANCE



Side battery extraction system.



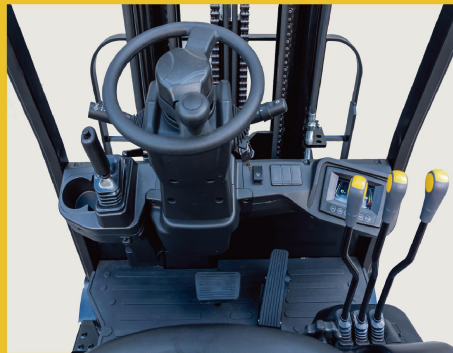
Fully opening engine cover for easy maintenance of the battery and hydraulic pump motor.



Fully opening electrical control cover for easy maintenance of electric controls and fuses.

Tool-free removable floor plate for easy maintenance of the drive motor and DCDC, etc.

## SUPERIOR ERGONOMICS



The ergonomically designed adjustable steering wheel enhances comfort.



Fully enclosed instrument console with front-mounted control levers greatly expand legroom.



Adjustable suspension seat (Optional), allowing the operator to select the optimal driving position.



Finger-tip control system (Optional), ensures a superior driving experience.

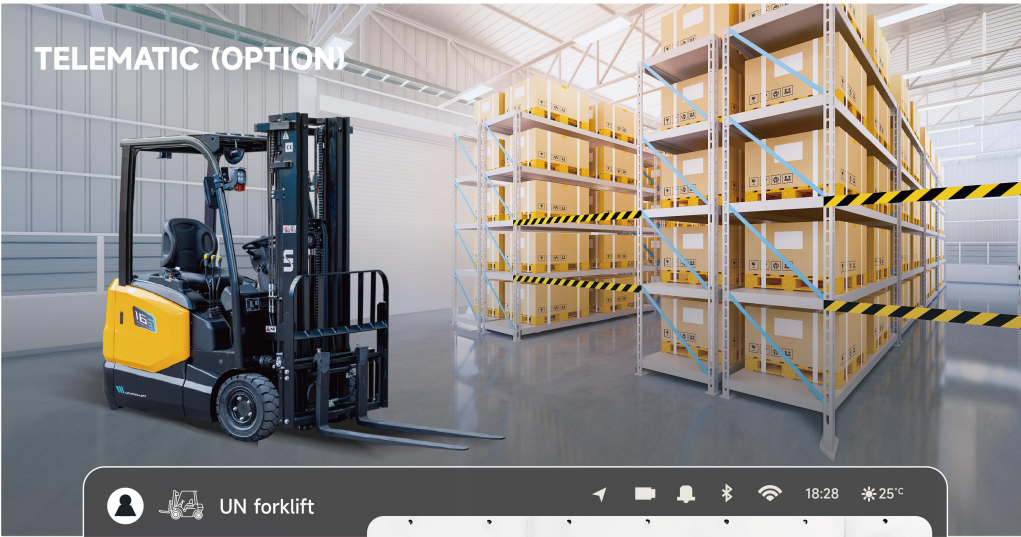


Multi-function color screen instrument provides key information of forklift.



USB & TYPE C for mobile devices.

# TELEMATIC (OPTION)



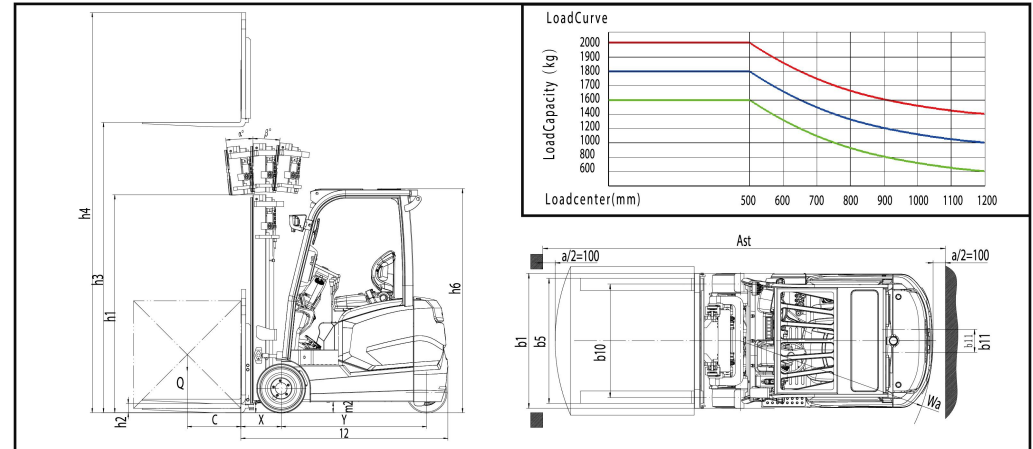
UN forklift

18:28 25°C

- Vehicle Monitoring
- Track Playback
- Dynamic Monitoring
- Statistical Report
- Fault Handling
- Operation Management
- Basic Information
- System Management

MAST SPECIFICATIONS & RATED CAPACITIES																
Mast Type	Mast Name	Max. Fork Height (mm)	Load Capacity (kg)			Overall Height (mm)			Free Lift (mm)				Tilt Angle	Total Weight (kg)		
						Lowered	Extended		Without Backrest		With Backrest					
			FBT16	FBT18	FBT20	1.6t/1.8t/2.0t	1.6t/1.8t/2.0t	1.6t/1.8t/2.0t	1.6t/1.8t	2.0t	1.6t/1.8t	2.0t		1.6t	1.8t	2.0t
Wide View Mast	SM300	3000	1600	1800	2000	2025	3634	4052	85	90	85	85	6/6	3280	3450	3480
	SM330	3300	1600	1800	2000	2175	3934	4352	85	90	85	90	6/6	3300	3470	3500
	SM350	3500	1600	1800	2000	2275	4134	4552	85	90	85	90	6/6	3310	3480	3510
	SM370	3700	1600	1800	2000	2375	4334	4752	85	90	85	90	6/6	3325	3495	3525
	SM400	4000	1600	1800	2000	2575	4634	5052	85	90	85	90	3/5	3390	3560	3590
	SM450	4500	1500	1700	1850	2825	5134	5552	85	90	85	90	3/5	3420	3590	3620
3-Stage Full Free Wide View Mast	SM500	5000	1400	1600	1700	3075	5634	6052	85	90	85	90	3/3	3490	3660	3690
	STFM400	4000	1600	1800	2000	1915	4634	5042	1341		933		3/5	3455	3625	3655
	STFM435	4350	1500	1700	1900	2030	4984	4392	1456		1048		3/5	3480	3650	3680
	STFM450	4500	1450	1650	1850	2080	5134	5542	1506		1098		3/5	3490	3660	3690
	STFM480	4800	1400	1600	1800	2180	5434	5842	1606		1198		3/5	3515	3685	3715
	STFM500	5000	1300	1500	1600	2280	5634	6042	1706		1298		3/3	3535	3705	3735
3-Stage Full Free Wide View Mast	STFM550	5500	1100	1200	1350	2450	6134	6542	1876		1468		3/3	3615	3785	3815
	STFM600	6000	900	1000	1100	2700	6634	7042	2126		1718		3/3	3660	3830	3860
	STFM650	6500	800	900	1000	2875	7134	7542	2301		1893		3/3	3700	3870	3900

With side shifter, load capacity subtract 150kg.



## MAIN SPECIFICATIONS

		UN				
		FBT16	FBT18	FBT20		
General	1	Manufacturer				
	2	Model				
	3	Drive: Electric (battery or mains), Diesel, Petrol, fuel gas				
	4	Operator type: Hand, Pedestrian, Standing, Seated, order-picker				
	5	Load capacity/rated load	Q(kg)	1600	1800	2000
	6	Load centre distance	c(mm)	500	500	500
	7	Load distance, center of drive axle to fork	x(mm)	375	375	375
	8	Wheelbase	y(mm)	1355	1355	1450
	9	Total Weight	kg	3280	3380	3430
Chassis	10	Tires: Solid rubber, Superelastic, Pneumatic, Polyurethane				
	11	Tyre size (Front x 2)				
	12	Tyre size (Rear x 2)				
	13	Front tread	b10(mm)	918	918	924
	14	Rear tread	b11(mm)	180	180	180
	Dimensions	15	Tilt of mast/fork carriage forward/backward	α/β (°)	6°/6°	6°/6°
16		Mast lowered height	h1(mm)	2025	2025	2025
17		Free lift height	h2(mm)	85	85	80
18		Rated lift height	h3(mm)	3000	3000	3000
19		Mast extended height (With backrest)	h4(mm)	4052	4052	4052
20		Overhead guard height	h6(mm)	2085	2085	2085
21		Length to face of fork (Without fork)	l2(mm)	1930	1930	2025
22		Overall width	b1(mm)	1090	1090	1120
23		Fork size (l×e×s)	l/e/s(mm)	920×100×35	920×100×35	1070×100×40
24		Distance between fork-arms	b5(mm)	200/1010	200/1010	200/1010
25		Ground clearance (Laden, below mast)	m1(mm)	115	115	115
26		Ground clearance (Centre of wheelbase)	m2(mm)	103	103	103
27		Aisle width for pallets 1000×1200 crossways	As1(mm)	3261	3261	3351
28		Aisle width for pallets 800×1200 lengthways	As2(mm)	3386	3386	3476
Performance	29	Turning radius (Outside)	Wa(mm)	1560	1560	1655
	30	Travel speed (Full load)	km/h	13	13	13
	31	Travel speed (No load)	km/h	14	14	14
	32	Lifting speed (Full load)	mm/s	300	300	300
	33	Lifting speed (No load)	mm/s	400	400	400
	34	Max. Gradeability (Full load)	%	15	15	15
Power & Transmission	35	Max. Gradeability (No load)	%	15	15	15
	36	Service brake		Hydraulic	Hydraulic	Hydraulic
	37	Parking brake		Mechanical	Mechanical	Mechanical
	38	Drive motor rating S2-60min	kw	2×4.8 / 2×5	2×4.8 / 2×5	2×4.8 / 2×5
	39	Lift motor rating at S3-15min	kw	9.5 / 11	9.5 / 11	9.5 / 11
	40	Battery voltage, nominal capacity	V/Ah	48V/460Ah 77.28V/150Ah	48V/460Ah 77.28V/150Ah	48V/540Ah 77.28V/150Ah
	41	Battery weight	kg	748 / 780	748 / 780	866 / 780
	42	Type of drive control		MOS/AC	MOS/AC	MOS/AC
	43	Manufacturer		ZAPI	ZAPI	ZAPI
	44	Operating pressure (For attachments)	Mpa	17.5	17.5	17.5