

FE4P40-50Q FE4P50QL

Four wheel Li-ion Electric Forklift



Professional Lithium-iron Forklift

ADVANTAGES

- Q series lithium electric forklift launched 4-5 tons model, referred to as FE4P40-50Q/FE4P50QL .
- The standard configuration is lithium iron phosphate (LFP) battery with efficient fast charging. Optional different battery capacities for various of working requirements: the standard configuration is 80V412Ah, optional 80V554Ah .
- Standard full AC control system and optional fleet management system. Standard REMA/Anderson connection for charging, optional automotive type intelligent plug-in high frequency charging technology.
- The truck is combined the durability of IC forklift with the layout advantage of Li-ion electric forklift, so that the truck's weight is light and gravity center is optimized, and the overall energy consumption is effectively improved.



Excellent ergonomic design



Li-Iron



Easy maintenance



Robust design



Capacity:
2500-3500Kg



High performance



Reliable quality, safer and comfortable

- The mast system, front and rear axles as well as the durability of chassis are similar to traditional IC forklift.
- Big diameter tyres with better performance for outdoor applications, and comfortable driving experience, solid tyres as standard configuration.
- Standard with turning deceleration function, safer driving.



Ergonomic design, comfortable and reliable

- Long handle lever, good braking effect, less effort and easier to operate.
- Ratchet parking brake lever, more reliable, not slide for 15% ramp parking.
- Steering wheel and seat can be adjusted back and forth, more comfortable.
- U-shape design of steering wheel, front-located multi-way valve operating device makes the operation effortless and comfortable.
- Wide view for mast, making operation more comfortable.
- New large screen LED instrument, good visibility and intuitive reading.
- Optional Air Conditioning provides great comfort and safety under different weather conditions.

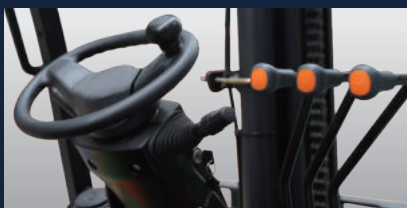
Optional Air Conditioning provides great comfort and safety under different weather conditions



Ratchet parking brake lever, more reliable, not slide for 15% ramp parking

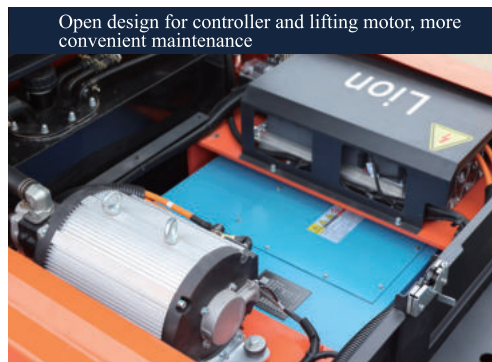


U-shape design of steering wheel, front-located multi-way valve operating device makes the operation effortless and comfortable



Simplified structure, easy for maintenance

- Side out lithium design, battery replacement convenient and quick.
- Charging form is flexible and optional, suitable for various operation scenarios.
- Open design for controller and lifting motor, more convenient maintenance.



Charging form is flexible and optional, suitable for various operation scenarios



Optional:
automotive type intelligent plug-in charging
gun with high frequency charging technology.
**Note: press the “stop” button of the charger
before pulling the gun.**

Standard:
REMA/Anderson plugin.



Standard Lithium power, high efficiency



All lithium-iron batteries are equipped built-in battery management system(BMS) that manages all important data during charging and discharging.

The management of the battery by BMS can ensure the safety of the battery throughout its life cycle. Lithium-iron batteries have been certified for safe transportation(by air and sea)and operating standards. BMS communicates with the truck management system through CAN. CAN protocol CAN monitor the battery and diagnose and repair the battery through specific software.

Lithium battery advantages

FAST CHARGING Charge your battery whenever and wherever you need

ENVIRONMENT-FRIENDLY High cost performance

SAFETY Efficient, Maintenance-free



Operation Cost

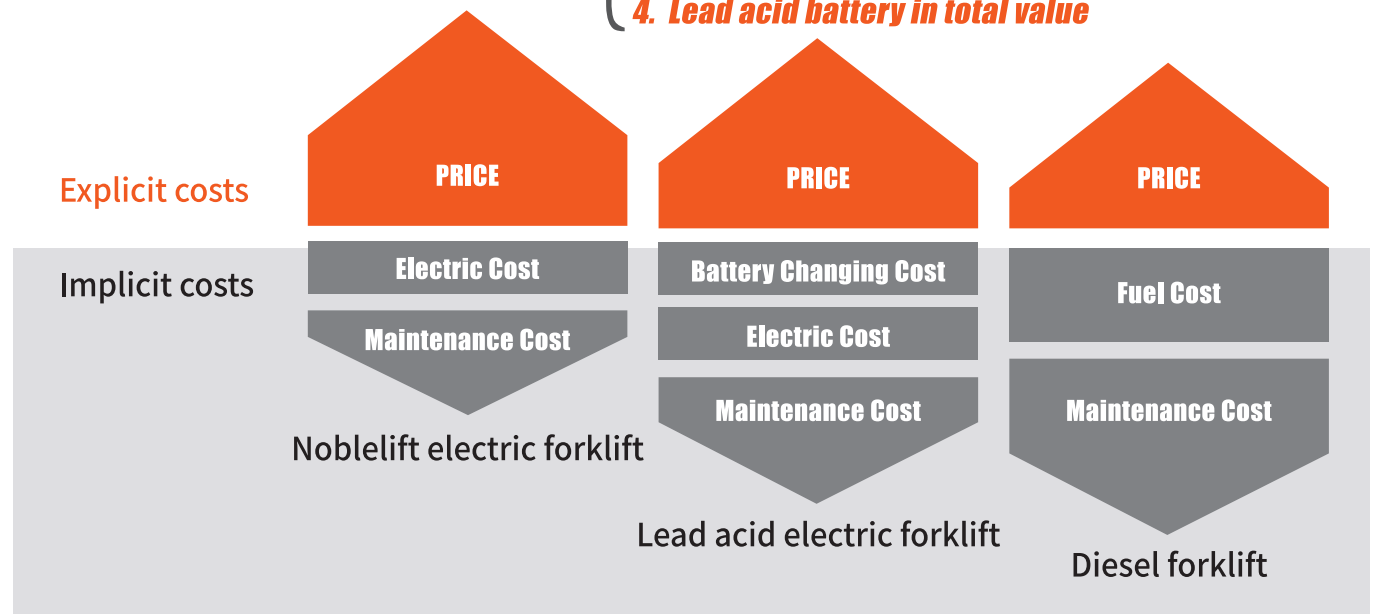
Li-ion electric forklift VS lead acid electric forklift VS diesel forklift

1. Lithium battery

2. Lead acid battery in productivity

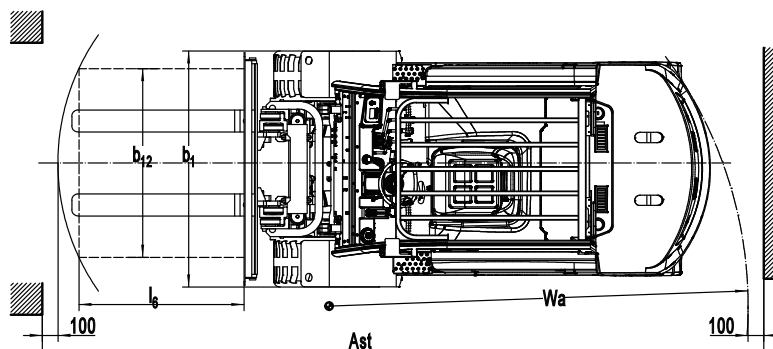
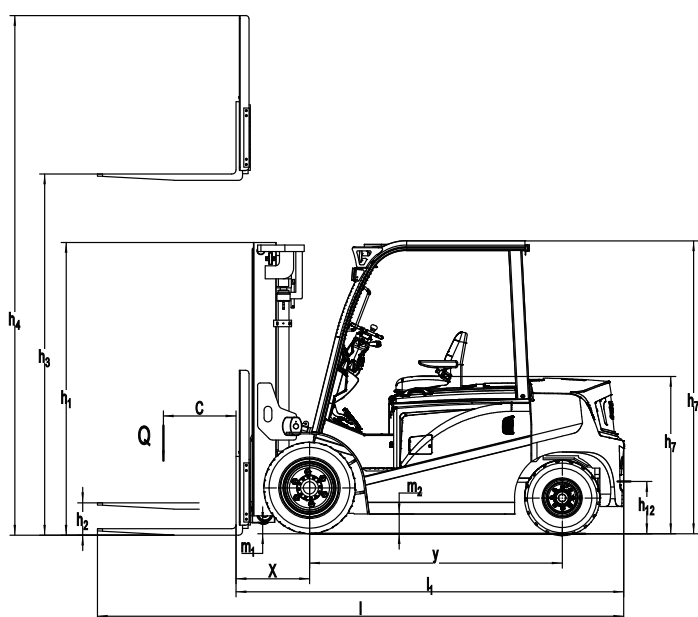
3. Lead acid battery in life cycle

4. Lead acid battery in total value



Mast Table FE4P40-50Q FE4P50QL

Designion	Lift height h3 (mm)	Free Lift height h2 (mm)	Closed mast height h1 (mm)	Extended mast height h4 (mm)	Tilt forward/backward α / $\beta(^{\circ})$	Capacity table(kg)			
						C=500mm		C=600mm	
						without sideshift single superelastic tyre			
						FE4P40Q	FE4P45Q	FE4P50Q	FE4P50QL
Two-stage ZT	2500	150	2010	3617	6/10	4000	4500	5000	5000
	2700	150	2110	3817	6/10	4000	4500	5000	5000
	3000	150	2260	4117	6/10	4000	4500	5000	5000
	3300	150	2410	4417	6/10	4000	4500	5000	5000
	3500	150	2510	4617	6/10	4000	4500	5000	5000
	3600	150	2560	4717	6/10	4000	4500	5000	5000
	3700	150	2610	4817	6/10	4000	4400	4900	4900
	4000	150	2810	5117	6/6	4000	4300	4750	4750
	4500	150	3060	5617	6/6	3700	3900	4250	4250
	4700	150	3160	5817	6/6	3600	3800	4100	4100
	5000	150	3310	6117	6/6	3400	3600	4000	4000
	6000	150	3860	7117	3/6	2800	3000	3400	3400
Two-stage ZZ	2500	1350	2010	3612	6/10	4000	4500	5000	5000
	2700	1450	2110	3812	6/10	4000	4500	5000	5000
	3000	1600	2260	4112	6/10	4000	4500	5000	5000
	3300	1750	2410	4412	6/10	4000	4500	5000	5000
	3500	1850	2510	4612	6/10	4000	4500	5000	5000
	3600	1900	2560	4712	6/10	4000	4500	5000	5000
	3700	1950	2610	4812	6/10	4000	4400	4900	4900
	4000	2100	2810	5112	6/6	4000	4300	4750	4750
Three-stage DZ	3700	917	1995	4808	6/10	4000	4400	4900	4900
	4000	1017	2095	5108	6/6	4000	4300	4750	4750
	4350	1132	2210	5458	6/6	3800	4000	4450	4450
	4500	1182	2260	5608	6/6	3700	3900	4250	4250
	4800	1282	2360	5908	6/6	3500	3700	4100	4100
	5000	1397	2475	6108	6/6	3400	3600	4000	4000
	5500	1562	2640	6608	3/6	3000	3200	3600	3600
	6000	1807	2885	7068	3/6	2800	3000	3400	3400



Type sheet for industrial truck acc. to VDI 2198

Identification						
1.2	Manufacturer's type designation		FE4P40Q	FE4P45Q	FE4P50Q	FE4P50QL
1.3	Drive:electric(battery or mains),diesel,petrol gas>manual)		electric	electric	electric	electric
1.4	Type of operation(hand,pedestrian,standing,seated,order-picker)		seated	seated	seated	seated
1.5	Load capacity/rated load	Q(kg)	4000	4500	5000	5000
1.6	Load centre distance	c(mm)	500	500	500	600
1.8	Load distance,centre of drive axle to fork	x(mm)	563	563	563	568
1.9	wheelbase	y(mm)	1950	1950	1950	1950
Weights						
2.1	Service weight incl. battery	kg	6200	6500	6950	7400
2.2	Axle loading ,laden front/rear	kg	9180/1020	9850/1150	10610/1360	10800/1600
2.3	Axle loading,unladen front/rear	kg	2950/3250	2960/3540	2750/4200	2800/4600
Wheels- Chassis						
3.1	Type:solid rubber,superelastic,pneumatic,polyurethane		Solid rubber	Solid rubber	Solid rubber	Solid rubber
3.2	Tyres size,front		250-15	250-15	250-15	28×12.5-15
3.3	Tyres size,rear		23×9-10	23×9-10	23×9-10	23×9-10
3.5	Wheels,number front/rear(×=driven wheels)		2/×2	2/×2	2/×2	2/×2
3.6	Track width,front	b10(mm)	1200	1200	1200	1185
3.7	Track width,rear	b11(mm)	1125	1125	1125	1125
Basic Dimemsions						
4.1	Mast/fork carriage tilt forward/backward	$\alpha/\beta(^{\circ})$	6/10	6/10	6/10	6/10
4.2	lowered mast height	h1(mm)	2250	2250	2250	2250
4.3	Free lift	h2(mm)	150	150	150	150
4.4	Lift height	h3(mm)	3000	3000	3000	3000
4.5	Extended mast height	h4(mm)	4117	4117	4117	4117
4.7	Overhead load guardheight	h6(mm)	2265	2265	2265	2265
4.8	Seat height/standing height	h7(mm)	1200	1200	1200	1200
4.12	Coupling height	h10(mm)	490	490	490	490
4.19	Overall length	l1(mm)	4110	4110	4110	4115
4.20	Length to face of forks	l2(mm)	3040	3040	3040	3045
4.21	Overall width	b1(mm)	1500	1500	1500	1500
4.22	Fork dimensions	s/e/l(mm)	50/150/070	50/150/070	50/150/070	55/150/1070
4.24	Fork carriage width	b3(mm)	1380	1380	1380	1380
4.31	Ground clearance ,laden,under mast	m1(mm)	135	135	135	135
4.32	Ground clearance,centre of wheelbase	m2(mm)	165	165	165	165
4.33	Aisle width for pallets 1000×1200 crossways	Ast(mm)	4453	4453	4453	4458
4.34	Aisle width for pallets 800×1200 lengthways	Ast(mm)	4653	4653	4653	4658
4.35	Turning radius	Wa(mm)	2690	2690	2690	2690
Performance Data						
5.1	Travel speed,laden/unladen	km/h	14/15	14/15	14/15	14/15
5.2	Lift speed,laden/unladen	m/s	0.3/0.42	0.3/0.42	0.3/0.42	0.3/0.4
5.3	lowering speed,laden/unladen	m/s	0.38/0.3	0.38/0.3	0.38/0.3	0.38/0.3
5.5	Drawbar pull,laden/unladen S2 60 min	N	5800/6200	6000/6500	6200/6650	6200/6650
5.6	Max.drawbar pull ,laden/unladen S2 5 min	N	17500/17000	17800/17500	18500/18000	18500/18000
5.7	Max.Gradient performance,laden/unladen S2 30 min	%	16 / 20	15 / 20	15 / 20	15 / 20
5.10	Service brake		Mechanical	Mechanical	Mechanical	hydraulic
E-Motor						
6.1	Drive motor rating S2 60 min	kW	20	20	20	20
6.2	Lift motor rating at S3 15%	kW	26	26	26	26
6.3	Battery standard		Lion	Lion	Lion	Lion
6.4	Battery voltage,nominal capacity K5	V/Ah	76.8/412(554)	76.8/412(554)	76.8/412(554)	76.8/412(554)
6.5	Battery weight	kg	330/420	330/420	330/420	330/420
6.6	Battery dimensions l/w/h	mm	1200/810/610	1200/810/610	1200/810/610	1200/810/610
Other Details						
8.1	Type of drive control		AC	AC	AC	AC
8.2	Operating pressure for attachments	Mpa	18.5	18.5	18.5	18.5
8.3	Oil volume for attachments	l/min	65	65	65	65
8.4	Sound level at driver's ear according to EN 12 053	dB(A)	75	75	75	75