## **FE4P60-80N**

# Lead acid/Lithium battery counter-balanced forklift

#### **ADVANTAGES**

Welcome to the future of heavy lifting with our brand new FE4P60-80 N Series, a remarkable addition to our independently developed large-tonnage counter-balanced forklifts. This innovation sets new standards in appearance, efficiency, comfort, safety, and reliability. With three versatile load capacity options of 6, 7, and 8 tons, it adapts to your unique needs.

Featuring a rugged, streamlined design, optimized structural engineering, reduced width, and lower self-weight, this forklift effortlessly maneuvers through narrow passages with remarkably low energy consumption. Tailored to excel in the most demanding industries, such as metallurgy, ports, container yards, automotive, and mold manufacturing, where environmental protection is paramount. It replaces traditional internal combustion forklifts, operating efficiently without noise and emissions, promoting a healthier and eco-friendly workspace.



#### **High Efficiency**

- High-power driving motor elevates the 8-ton forklift's top speed to 15.5 km/h and enhances its full-load grade ability by 15%.
- Precision grinding in the driving axle gear and low-speed AC asynchronous motor minimize transmission system noise.
- With a high-power oil pump motor and low-noise screw pump, the lifting speed soars. The 8-ton forklift now raises full loads at 300 mm/s.
- A streamlined design with a short wheelbase 2030mm and reduced body width dramatically enhances maneuverability.
- Lightweight construction and independent steering motor electric control decrease energy consumption.
- Equipped with a steering sensor that adjusts motor speed based on the steering wheel's rotation, reducing energy consumption and motor noise.

#### **Highlights**

- Small turning radius (2980mm) for exceptional maneuverability.
- Reversing image system eliminates blind spots below the balance weight.
- Speed limit function ensures safer turning with automatic deceleration.
- Convenient features include USB charging, folder, mobile phone bracket, and cup holder.
- Equipped with OPS descending solenoid valve, CE compliant.
- Enhanced operating space with ample headroom, even with a suspension seat.
- The 8-ton standard model easily fits into high cube container.
- A versatile 96V voltage platform with module design. A rational structural design for excellent sealing, waterproofing, and dustproofing.
- Compatible with both lead acid and lithium batteries, allowing for quick battery changes.
- The oil pump motor and controller is positioned on each side of the forklift, with tool-free side panels for easy maintenance and repairs.
- A split hydraulic oil tank for hassle-free maintenance and cleaning, along with a rotary hydraulic oil return filter for easy replacement.
- Customizable for container operations with lithium battery models, maintaining a compact height of 2230mm.



#### Comfort

- Added secondary pedal and enlarged handle for easier on/off access.
- Multifunctional color screen instrument with integrated forklift networking capabilities and a user-friendly human-computer interaction interface.
- Humanized design includes an integrated storage box, USB charging, mobile phone bracket, cup holder, and more.
- The tilting cylinder design recesses beneath the bottom plate, leveling the foot platform, expanding longitudinal operation space, and headroom in the overhead guard, ensuring a more comfortable forklift operation.

#### Safety

- Standard AI intelligent imaging system minimizes blind spots.
- Turning deceleration function reduces rollover risk.
- Equipped with OPS system in line with safety regulations.
- Wide-angle rearview mirrors ensure a safer driving experience.
- Mast soft landing minimizes impact during loading.
- Features LED working lights, signal lights, and acousto-optic alarm lights.

#### **Effortless Maintenance**

- Fully open chassis and electric control covers for convenient access to battery, oil pump motor, and electric control assembly.
- Detachable side doors simplify maintenance of the electric control and oil pump motor, offering waterproof and dustproof protection.
- Dismounting-free floor design streamlines maintenance for the driving motor, steering motor, and other systems.
- Optional battery side removal enables quick battery replacement.













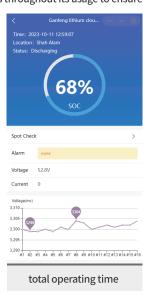


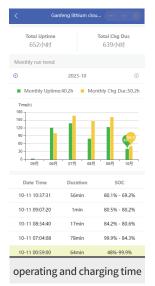


### **Lithium-ion Smart Cloud Platform**

Constantly monitors the battery's operational status throughout its usage to ensure the safety of personnel and equipment.

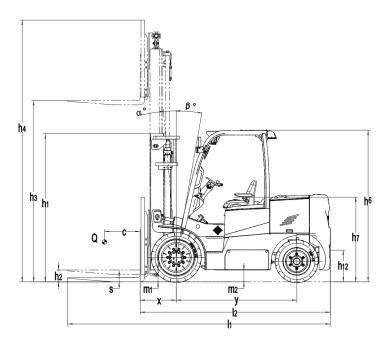


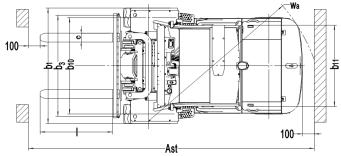




Designtion	Lift height	Free Lift	Closed mast height	Extended mast height	Tilt forward/backward	Capacity table(kg) C=600 mm without sideshift, single pneumatic tyres		
Designation	h3 mm	h2 mm	h1 mm	h4 mm	α / β(°)	FE4P60N	FE4P70N	FE4P80N
	2500	200	2250	3930	5/10	6000	7000	8000
	2700	200	2350	4130	5/10	6000	7000	8000
	3000	200	2500	4430	5/10	6000	7000	8000
	3300	200	2650	4730	5/10	6000	7000	8000
	3600	200	2800	5030	5/10	6000	7000	8000
Two-stage ZT	4000	200	3050	5430	5/10	6000	7000	8000
Two stage 21	4300	200	3200	5730	5/8	6000	7000	8000
	4500	200	3300	5930	5/8	6000	7000	8000
	4800	200	3450	6230	5/8	5800	6700	7700
	5000	200	3550	6430	5/8	5700	6500	7500
	5500	200	3850	6930	5/8	5400	6200	7200
	6000	200	4100	7430	5/8	5000	5900	6900
	3000	1218	2520	4430	5/10	6000	7000	8000
	3300	1368	2670	4730	5/10	6000	7000	8000
Full Free lift	3500	1468	2770	4930	5/10	6000	7000	8000
	3750	1593	2895	5180	5/10	6000	7000	8000
	4000	1768	3070	5430	5/10	6000	7000	8000
	4000	1093	2395	5430	5/8	5800	6800	7700
	4350	1218	2520	5780	5/8	5750	6750	7650
	4500	1268	2570	5930	5/8	5700	6700	7600
Three-stage DZ	4800	1368	2670	6230	5/8	5600	6600	7500
	5000	1468	2770	6430	5/8	5500	6400	7400
	5500	1628	2930	6930	5/8	5300	6200	7200
	6000	1894	3196	7430	5/8	5200	5800	6800

Free lifting height of the third level gantry (without shelves)+430





	Identification				
.2 –	Manufacturer's type designation		FE4P60N	FE4P70N	FE4P80N
.3	Drive:electric(battery or mains),diesel,petrol gas,manual)		electric	electric	electric
.4 	Type of operation(hand,pedestrian,standing,seated,order-picker)		seated	seated	seated
.5 	Load capacity/rated load	Q(kg)	6000	7000	8000
.6 	Load centre distance	c(mm)	600	600	
.8 	Load distance,centre of drive axle to fork	x(mm)	595	600	610
.9	wheelbase	y(mm)	2030	2030	2030
- 1	Weights	lea-	9600 (8930)	10200 (0400)	11000 (11200)
.1 .2	Service weight incl. battery lead-acid /Lion Axle loading ,laden front/rear lead-acid /Lion	kg	f	10300 (9400)	11900 (11200)
.2 .3		kg	13600/2000(13190/1740)	15200/2100(14550/1850)	17730/2170(17240/190
.3		ı kg	4000/5600(3650/5280)	4000/6300(3400/6000)	4800/7100(4320/688
.1	Wheels Chassis Type:solid rubber,superelastic,pneumatic,polyurethane	1	solid rubber	solid rubber	solid rubber
- 2	Tyres size, front		355/65-15	355/65-15	355/50-20
- .3	Tyres size,rear		250-15	250-15	250-15
	Wheels,number front/rear(×=driven wheels)		230-13 2×/2	2×/2	2×/2
.5  .6	Track width, front	b10(mm)	1574	1574	1623
			·		
.7	Track width,rear Basic Dimensions	b11(mm)	1370	1370	1370
.1	Mast/fork carriage tilt forward/backward	α/β(°)	5/10	5/10	5/10
- 2	lowered mast height	h1(mm)	2500	2500	2500
- .3	Free lift	h2(mm)	185	190	200
 4	Lift height	h3(mm)	3000	3000	3000
 .5	Extended mast height	h4(mm)	4420	4420	
.3  .7	¦				
	Overhead load guardheight	h6(mm)	2560	2560	2560
8	Seat height/standing height	h7(mm)	1430	1430	1430
.12	Coupling height	h10(mm)	535	535	535
.19	Overall length	11(mm)	4407	4412	4427
.20	Length to face of forks	12(mm)	3187	3192	3207
.21	Overall width	b1(mm)	1870	1870	1945
.22	Fork dimensions	s/e/l(mm)	60/150/1220	65/150/1220	75/150/1220
.24	Fork carriage width	b3(mm)	1700	1700	1700
.31	Ground clearance ,laden,under mast	m1(mm)	200	200	200
.32	Ground clearance, centre of wheelbase	m2(mm)	198	198	198
.33	Aisle width for pallets 1000×1200 crossways	Ast(mm)	4770	4775	4790
.34	Aisle width for pallets 800×1200 lengthways		4970	4975	4990
.35	Turning radius	Wa(mm)	2980	2980	2980
	Performance Data				
.1	Travel speed,laden/unladen	km/h	15/15.5	15/15.5	14.5/15.5
.2	Lift speed,laden/unladen	m/s	0.34/0.39	0.32/0.39	0.30/0.39
.3	lowering speed,laden/unladen	m/s	0.40/0.43	0.39/0.43	0.38/0.43
.5	Max.drawbar pull,laden/unladen	N	36000	36000	36000
.7	Max.Gradient performance,laden/unladen S2 5 min	%	15	15	14
10	Service brake		hydraulic	hydraulic	hydraulic
	E-Motor				
	Drive motor rating S2 60 min	kW	35	35	35
.2	Lift motor rating at S3 15%	kW	40	40	40
.3	Battery standard		lead-acid/Lion	lead-acid/Lion	lead-acid/Lion
.4	Battery voltage,nominal capacity K5	V/Ah	96/720(810/945 Optional)	96/720(810/945 Optional)	96/720(810/945 Optiona
	Lion	V/2 XII	96/412(554/618/840 Optional)	96/412(554/618/840 Optional)	96/412(554/618/840 Optio
	Battery weight	kg	2310 (500)	2310 (500)	2310 (500)
.5	Battery dimensions l/w/h	mm	1420/610/570	1420/610/570	1420/610/570
	Other Details				
.1	Type of drive control		AC	AC	AC
.2	Operating pressure for attachments	Mpa	21	21	21
 .3	Oil volume for attachments		80	80	80
	Sound level at driver's ear according to EN 12 053	l/min dB(A)	74	74	75