

Updated N-Series Lithium-Special Indoor Compact Electric Forklift

FEP-20-35NP

2000-3500 kg Capacity
80V Li-ion



Why choose between price and quality **WHEN YOU CAN HAVE BOTH!**

HIGHLIGHTS

- ▶ Powerful and efficient AC drive system
- ▶ Side-shift
- ▶ Standard head-up display for improved safety
- ▶ On-board self-diagnostic system
- ▶ Wireless 4G battery monitoring
- ▶ LED rear work light, headlight and strobe light
- ▶ Tilt cylinder boots
- ▶ Side extraction battery
- ▶ 80V Li-ion
- ▶ Standard Shimadzu low-noise gear pump
- ▶ Standard Shimadzu Silent Gear Pump
- ▶ Featuring CATL battery cells
- ▶ Standard turning speed reduction
- ▶ Vehicle waterproof rating: IPX4
- ▶ Motor and battery protection rating: IP65



FEP-20-35NP

2000-3500 kg. Capacity

Lithium-dedicated chassis with a low-mounted battery lowers the center of gravity and enhances stability. Fully enclosed operator compartment with a side-opening battery door enables fast and easy battery replacement.

INNOVATIVE SOLUTIONS

New Power • Ready to Go



The NP Series of electric forklifts by Noblelift, covering load capacities from 2.0 to 3.5 tons, features an all-new chassis design.

Innovative and reliable lithium-ion technology, featuring Pengcheng batteries (CATL cells). Ensures exceptional quality and is custom-engineered for Noblelift.

Standard with 80V 100A fast charger, with optional rapid battery swap for worry-free runtime. Equipped with battery heating to ensure reliable operation in low-temperature environments.

Capacity (V/Ah)	Battery cell	
80V/200Ah	CATL	2-3.5T
80V/268Ah	CATL	2-3.5T
80V/400Ah	CATL	2-3.5T
80V/536Ah	CATL	3-3.5T



CATL battery cells come with an 8-year or 16,000-hour warranty.

Excellent Ergonomic Design

- ▶ Equipped with a permanent magnet synchronous lift motor, improving energy efficiency by **15%**, paired with a Shimadzu low-noise gear pump as standard.
- ▶ Ergonomic design provides driver operating space equivalent to internal combustion models, with **30%** more operating space than traditional electric forklifts and exceptional legroom.
- ▶ Lift speed approaches that of internal combustion forklifts, with a no-load maximum of 600 mm/s. Climbing capability reaches **20%**, and a 15% slope hold is achievable when fully loaded at 3.5T. Travel speed reaches 18–19 km/h.
- ▶ Equipped with a smart HUD display, offering intuitive operation and real-time monitoring of vehicle parameters. Electric control parameters can be adjusted directly via the display, without the need for a handheld device.



Easy operations and maintenance

Internal components are protected with fully sealed covers, ensuring dustproof and waterproof protection for controllers, motors, and other electrical components.

Standard emergency stop switch complies with EU regulations.

The forklift is CE certified.

Vehicle waterproof rating: IPX4

Motor and battery protection rating: IP65



The hood opens at a wide angle for easy maintenance.



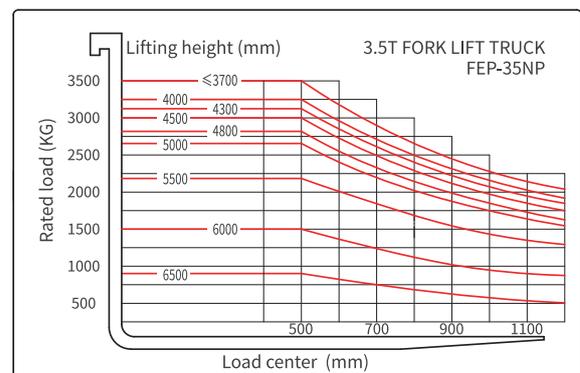
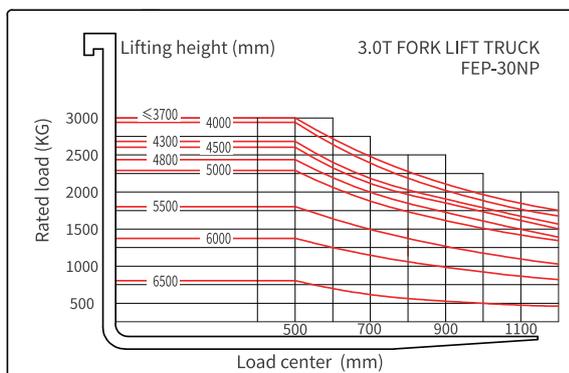
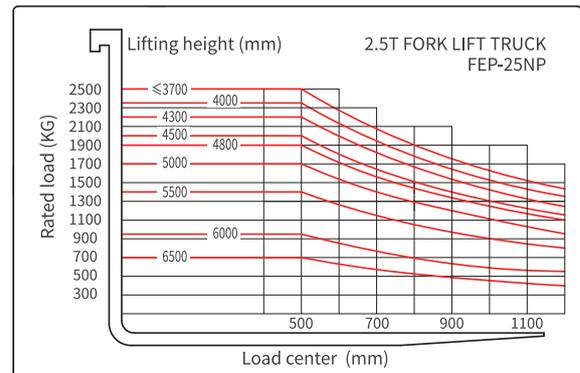
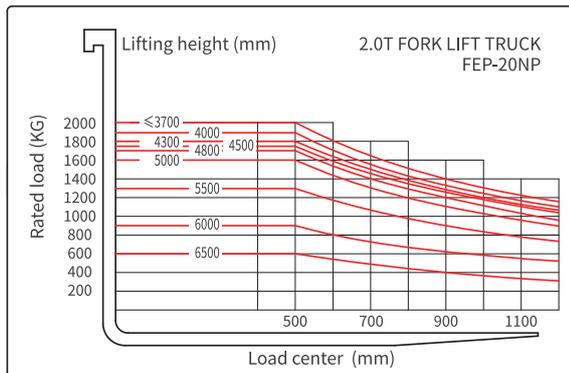
Mast layout is optimized for a wide view and clear visibility while operating.

Safe and Reliable



Cast steering axle with large steering cylinder ensures smoother turning.

Load curve graph



Mast Table FEP-20NP / FEP-25NP

Designation	Lift height h3 (mm)	Free height h2 (mm)	Closed mast height h1 (mm)	Extended mast height h4 (mm)	Tilt forward/backward $\alpha / \beta(^{\circ})$	Capacity table(kg) C=500mm without sideshift single tyres	
						FEP-20NP	FEP-25NP
Two-stage ZT	2000	120	1545	2977	6/12	2000	2500
	2500	120	1795	3227	6/12	2000	2500
	3000	120	2045	3977	6/12	2000	2500
	3300	120	2195	4277	6/12	2000	2500
	3500	120	2295	4477	6/12	2000	2500
	3600	120	2345	4577	6/12	2000	2500
	3700	120	2395	4677	6/6	2000	2500
	4000	120	2595	5077	6/6	2000	2500
	4300	120	2745	5377	6/6	1850	2100
	4500	120	2845	5577	6/6	1700	2000
	5000	120	3145	6077	6/6	1400	1600
5500	120	3395	6677	3/6	1050	1200	
6000	120	3645	7177	3/6	700	800	
Two-stage ZZ	2000	558	1545	2971	6/12	2000	2500
	2500	808	1795	3471	6/12	2000	2500
	3000	1058	2045	3971	6/12	2000	2500
	3300	1208	2195	4271	6/12	2000	2500
	3500	1308	2295	4471	6/12	2000	2500
	3600	1358	2345	4571	6/12	2000	2500
	3700	1408	2395	4671	6/6	2000	2500
	4000	1608	2595	4971	6/6	2000	2500
	4300	1758	2745	5271	6/6	1850	2100
	4500	1858	2845	5471	6/6	1700	2000
	5000	2158	3145	5971	6/6	1400	1600
5500	2408	3395	6471	3/6	1050	1150	
6000	2658	3645	6971	3/6	700	800	
Three-stage DZ	4000	983	1970	4981	6/6	1900	2300
	4300	1108	2095	5331	6/6	1700	2000
	4500	1158	2145	5479	6/6	1600	1900
	4800	1258	2245	5779	6/6	1400	1600
	5000	1401	2388	5979	6/6	1300	1500
	5500	1635	2622	6479	3/6	1000	1150
	6000	1868	2855	6979	3/6	700	800

• Lift height (no load Backrest)+425mm

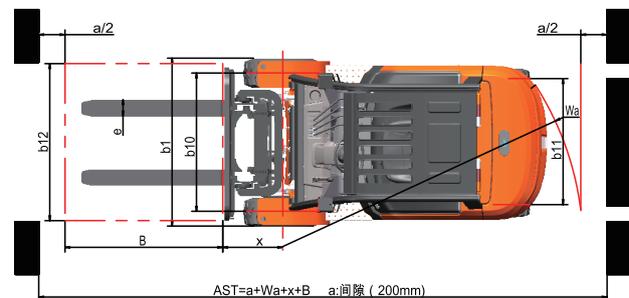
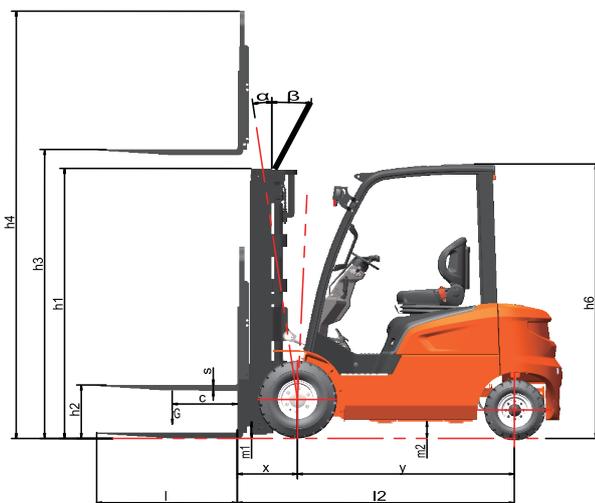
Mast Table FEP-30NP / FEP-35NP

Designation	Lift height h3 (mm)	Free height h2 (mm)	Closed mast height h1 (mm)	Extended mast height h4 (mm)	Tilt forward/backward $\alpha / \beta(^{\circ})$	Capacity table(kg) C=500mm without sideshift single tyres	
						FEP-30NP	FEP-35NP
Two-stage ZT	2000	125	1545	2977	6/12	3000	3500
	2500	125	1795	3227	6/12	3000	3500
	3000	125	2045	3977	6/12	3000	3500
	3300	125	2195	4277	6/12	3000	3500
	3500	125	2295	4477	6/12	3000	3500
	3600	125	2345	4577	6/12	3000	3500
	3700	125	2395	4677	6/6	2950	3250
	4000	125	2595	5077	6/6	2850	3000
	4300	125	2745	5377	6/6	2700	2800
	4500	125	2845	5577	6/6	2500	2600
	5000	125	3145	6077	6/6	2100	2200
Two-stage ZZ	2000	563	1545	2971	6/12	3000	3500
	2500	813	1795	3471	6/12	3000	3500
	3000	1063	2045	3971	6/12	3000	3500
	3300	1213	2195	4271	6/12	3000	3500
	3500	1313	2295	4471	6/12	3000	3500
	3600	1363	2345	4571	6/12	3000	3500
	3700	1413	2395	4671	6/6	3000	3500
	4000	1613	2595	4971	6/6	2850	3200
	4300	1763	2745	5271	6/6	2700	2850
	4500	1863	2845	5471	6/6	2500	2600
5000	2163	3145	5971	6/6	2100	2200	
Three-stage DZ	4000	988	1970	4981	6/6	2750	3200
	4300	1113	2095	5331	6/6	2600	3000
	4500	1163	2145	5479	6/6	2400	3000
	4800	1263	2245	5779	6/6	2200	2500
	5000	1406	2388	5979	6/6	2000	2400
	5500	1640	2622	6479	3/6	1500	1750
	6000	1873	2855	6979	3/6	1200	1250

• Lift height (no load Backrest)+425mm

1	Manufacturer's type designation		FEP-20NP	FEP-25NP	FEP-30NP	FEP-35NP
2	Drive		electric	electric	electric	electric
3	Type of operation		Seated	Seated	Seated	Seated
4	Load capacity/rated load	Q (kg)	2000	2500	3000	3500
5	Load centre distance	c (mm)	500	500	500	500
6	Load distance,centre of drive axle to fork	x (mm)	452	452	457	462
7	wheelbase	y (mm)	1520	1520	1650	1650
8	Service weight incl	kg	3790	3942	4573	4748
9	Axle loading ,laden front/rear	kg	5100/690	5689/753	6740/833	7318/930
10	Axle loading,unladen front/rear	kg	1630/2160	1699/2243	1920/2653	2836/1912
11	Type:solid rubber,superelastic,pneumatic,polyurethane		Pneumatic tire	Pneumatic tire	Pneumatic tire	solid tire
12	Tyres size,front		23×9-10	23×9-10	23×9-10	23×10-12
13	Tyres size,rear		18×7-8	18×7-8	18×7-8	200/50-10
14	Track width,front	b10 (mm)	1057	1057	1057	1068
15	Track width,rear	b11 (mm)	955	955	955	967
16	Mast/fork carriage tilt forward/backward	α/β (°)	6/12	6/12	6/12	6/12
17	lowered mast height	h1 (mm)	2001	2001	2151	2151
18	Free lift	h2 (mm)	140	140	145	145
19	Lift height	h3 (mm)	3000	3000	3000	3000
20	Extended mast height	h4 (mm)	4040	4040	4135	4135
21	Overhead load guardheight	h6 (mm)	2100	2100	2100	2100
22	Overall length	l2 (mm)	2336	2336	2480	2480
23	Overall width	b1 (mm)	1283	1283	1283	1315
24	Fork dimensions	s*e*l (mm)	1070×122×40	1070×122×40	1070×122×45	1070×122×50
25	Fork carriage width	b5 (mm)	290/1100	290/1100	290/1100	290/1100
26	Ground clearance ,laden,under mast	m1 (mm)	120	120	120	120
27	Ground clearance,centre of wheelbase	m2 (mm)	125	125	125	125
28	Aisle width for pallets 1000×1200 crossways	Ast (mm)	3752	3752	3877	3882
29	Aisle width for pallets 800×1200 lengthways	Ast (mm)	3952	3952	4077	4082
30	Turning radius	Wa (mm)	2100	2100	2220	2220
31	Travel speed,laden/unladen	km/h	18/19	18/19	18/19	18/19
32	Lift speed,laden/unladen Two stage gantry	mm/s	450/600	430/600	410/540	390/540
33	lowering speed,laden/unladen Two stage gantry	mm/s	450/420	470/420	450/420	470/420
34	Max.Drawbar pull ,laden/unladen	N	15000	19000	22000	23000
35	Max.Gradient performance,laden/unladen	%	20/20	20/20	20/20	15/20
36	Service brake		Hydraulic	Hydraulic	Hydraulic	Hydraulic
37	Parking Brake		mechanical brake	mechanical brake	mechanical brake	mechanical brake
38	Drive motor rating S2 60 min	kW	16.6 AC	16.6 AC	16.6 AC	16.6 AC
39	Lift motor rating at S3 15%	kW	24 (PMM)	24 (PMM)	24 (PMM)	24 (PMM)
40	Battery voltage,nominal capacity K5	V/Ah	80/268	80/268	80/268	80/268
41	Battery weight	kg	220	220	320	320
42	Type of drive control		MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC

Structural Diagram



AST=a+Wa+x+B a:間隙 (200mm)

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