

COUNTERBALANCE FORKLIFT

FEP80-100N2

Electric Counterbalance Forklift

NOBLELIFT
Built for better.

OVERVIEW

BUILT FOR BETTER.

The FEP80-100N2 is a heavy-duty four-wheel electric forklift lifting 8,000–10,000kg, bringing lithium-electric efficiency to work that once demanded a diesel truck. It blends the raw power and durability of an internal-combustion forklift with the low running costs, quiet operation and comfort of electric — driven by dual imported motors, wet brakes and dual front tyres for strong, stable, heavy-load performance. A high-capacity lithium battery with dual-gun fast charging keeps it working around the clock, while intelligent safety systems, a rearview camera and dual-core EU-standard controllers protect operators and loads. It's built for demanding, high-throughput yards and ports.



Key Features

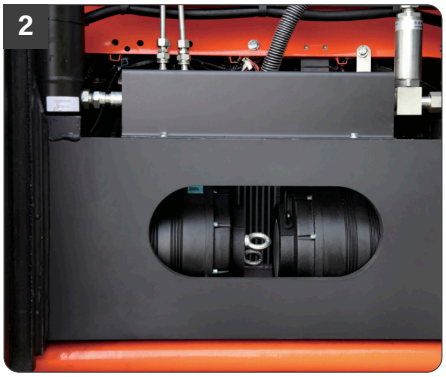
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System compatibility and unique style

A distinctive heavy-duty design that integrates the power and durability of an internal-combustion forklift with the efficiency and comfort of electric, running on a high-capacity lithium battery.

2



High efficiency and energy saving

Dual imported drive motors and a wet brake system deliver strong, stable power, while dual-gun fast charging, an on-demand independent steering system and energy-efficient LED lighting cut charging time and energy use across long, heavy-duty shifts.

3



Intelligent safety

A suite of intelligent systems protects operators and loads: regenerative braking with automatic parking, active turning speed limits, intelligent mast limit buffering, full operator-presence (OPS) protection, and dual-core controllers meeting the latest EU safety standards — backed by a standard rearview camera.

4



Easy maintenance

A centrally positioned, side-access battery, wide-opening front and rear covers, an optimised layout for heat dissipation, and a fully open design for hydraulic oil filling make daily inspections and servicing quick and easy.

INTELLIGENT SAFE AND RELIABLE.



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Comprehensive safety protection.



FEATURE	
Colour screen display	Shows speed, working hours, battery charge and fault codes at a glance.
Standard rear view camera	A rear camera improves all-round visibility and safety.
Reinforced overhead guard	An integrated top-cover design adds strength for operator protection.
Colour-changing parking brake	The parking brake button changes colour between parking and driving modes for clear, easy operation.
Independent steering, on-demand oil	An independent steering system supplies oil only when needed, cutting energy use.
Energy-efficient LED lighting	Brighter, longer-lasting, low-energy LED lights.
Dual front tyres	Twin front tyres add loading capacity and stability for heavy work.
Wide-opening covers & easy oil fill	Front and rear covers open wide and a fully open design makes hydraulic oil top-ups simple.

Specifications - FEP80/90/100N2i

Identification				
Manufacturer's type designation		FEP-80N2i	FEP-90N2i	FEP-100N2i
Drive:electric(battery or mains),diesel,petrol gas,manual)		electric	electric	electric
Type of operation(hand,pedestrian,standing,seated,order-picker)		seated	seated	seated
Load capacity/rated load	Q (kg)	8000	9000	10000
Load centre distance	c (mm)	600	600	600
Load distance,centre of drive axle to fork	x (mm)	670	670	670
wheelbase	y (mm)	2580	2580	2580
Weights				
Service weight incl. battery(see line 6.5)	kg	12740	13280	14100
Axle loading ,laden front/rear	kg	1850	1930	2050
Axle loading,unladen front/rear	kg	6400	6670	7080
Wheels Chassis				
Type:solid rubber, superelastic,pneumatic, polyurethane		Solid	Solid	Solid
Tyres size, front		8.25-15	8.25-15	8.25-15
Tyres size, rear		250-15	250-15	250-15
Wheels, number front/rear(×=driven wheels)		4X/2	4X/2	4X/2
Track width, front	b10(mm)	1686	1686	1686
Track width, rear	b11(mm)	1370	1370	1370
Dimensions				
Mast/fork carriage tilt forward/backward	α/β(°)	6/9	6/9	6/9
lowered mast height	h1 (mm)	2825	2825	2825
Free lift	h2 (mm)	196	196	196
Lift height	h3 (mm)	3000	3000	3000
Extended mast height	h4 (mm)	4330	4330	4330
Overhead load guardheight	h6 (mm)	2510	2510	2510
Seat height/standing height	h7 (mm)	1357	1357	1357
Coupling height	h10 (mm)	467	467	467
Overall length	l1 (mm)	5015	5015	5015
Length to face of forks	l2 (mm)	3795	3795	3795
Overall width	b1 (mm)	2165	2165	2165
Fork dimensions	s/e/l (mm)	80/175/1220	80/175/1220	80/175/1220
Fork carriage width	b3 (mm)	2165	2165	2165
Ground clearance ,laden,under mast	m1 (mm)	225/205	225/205	225/205
Ground clearance,centre of wheelbase	m2 (mm)	246/236	246/236	246/236
Aisle width for pallets 1000×1200 crossways	Ast(mm)	5210	5210	5210
Aisle width for pallets 800×1200 lengthways	Ast(mm)	5410	5410	5410
Turning radius	Wa (mm)	3350	3350	3350
Performance Data				
Travel speed, laden/unladen	km/h	14/15	14/15	14/15
Lift speed, laden/unladen	m/s	0.29/ 0.34	0.29/ 0.34	0.29/ 0.34
Lowering speed, laden/unladen	m/s	0.46/0.36	0.46/0.36	0.46/0.36
Max.Drawbar pull, laden/unladen	N	48400	48400	48400
Max.Gradient performance, laden/unladen	%	15/20	15/20	15/20
Service brake		Hydraulic	Hydraulic	Hydraulic
E-Motor				
Drive motor rating S2 60 min	kW	2x20	2x20	2x20
Lift motor rating at S3 15%	kW	2x25	2x25	2x25
Battery standard		Li-ion	Li-ion	Li-ion
Battery voltage,nominal capacity K5	V/Ah	96/920	96/920	96/920
Battery weight (96V/920Ah)	kg	1100	1100	1100
Battery dimensions(l/w/h)	mm	1280/1034/640	1280/1034/640	1280/1034/640
Other				
Type of drive control		AC	AC	AC
Operating pressure for attachments	Mpa	14	14	14
Oil volume for attachments	l/min	74	74	74
Sound level at driver's ear(according to EN 12 053)	dB(A)	75	75	75

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Configuration table - FEP80/90/100N2i

Model	Type	Configuration	Availability	Notes
FEP-80/90/100N2i	Packaging	Bare packaging	●	
	Front Wheel Drive Assembly	AC drive	●	
		PM drive	○	
	Safety	Hydraulic power braking	●	
		Lifting Cylinder Explosion Relief Valve	●	
		Self-locking tilt cylinder valve	●	
		OPS	●	
		Electronic detection of valve stem centre position	●	
		Fingerprint locks and key switches	●	
		Brake fluid active automatic cooling	●	
		Rear camera	●	
		Neutral gear start detection	●	
	Tyres	Black solid tyres	●	
		Non marking solid tyres	○	
	Guard roof and Cabin	Guard roof	●	
		Cabin with warm/cold airco on the top+rain wipers+fan	○	
		Cabin with cold airco on the top+rain wipers+fan	○	
	Vehicle registration plate	Vehicle registration plate holder	○	
	Lights	Full LED lights	●	Front working LED lights/Signal lights/Warning lights /rear working LED lights
		Left/right/rear blue spots	○	
		Left/right/rear red line lights	○	
		Rear blue spot	○	
		Front/rear blue spots	○	
	Charger	Charger(Double gun 200A*2)	●	with 63A 5-pin plug
		Charger(Single gun 200A*1)	○	Charging output interface: Anderson Type A connector
		Charger(single gun 150A*1)	○	with 32A 5-pin plug
	Battery	Li battery 96V920Ah	●	
		Li battery 96V692AH	○	
		Li battery 96V840Ah	○	
		Li battery 96V1216Ah	○	
	Fork leveling	Automatic Fork Leveling	○	
		Fork horizontal control lever	●	
	Mast Part	Duplex 3000 without FFL	●	
		Duplex 3500 without FFL	○	
		Duplex 4000 without FFL	○	
		Duplex 4500 without FFL	○	
		Duplex 5000 without FFL	○	
		Duplex 5500 without FFL	○	
		Duplex 6000 without FFL	○	
		Triplex 4500	○	
		Triplex 5000	○	
		Triplex 5500	○	
		Triplex 6000	○	
	Fork carriage	Fork positioner (width 2107mm)	●	
	Load backrest	Load backrest height 1300mm	●	
	Attachment	Integrated side shifter with fork positioner (width 2107mm)	○	4th valve needed
FEP-80N2i	Fork length	70×175×1220	●	8 tons
		70×175×1370	○	8 tons
		70×175×1520	○	8 tons
		70×175×1670	○	8 tons
		80×175×1750	○	8 tons
		80×175×1820	○	8 tons
		80×175×1970	○	8 tons
		80×175×2120	○	8 tons
		80×175×2270	○	8 tons
FEP-90/100N2i	Fork length	80×175×1220	●	9 tons, 10 tons
		80×175×1370	○	9 tons, 10 tons
		80×175×1520	○	9 tons, 10 tons
		80×175×1670	○	9 tons, 10 tons
		88×175×1820	○	9 tons, 10 tons
		88×175×1970	○	9 tons, 10 tons
		88×175×2120	○	9 tons, 10 tons
		88×175×2270	○	9 tons, 10 tons

Key: ● Standard · ○ Optional

Configuration table - FEP80/90/100N2i

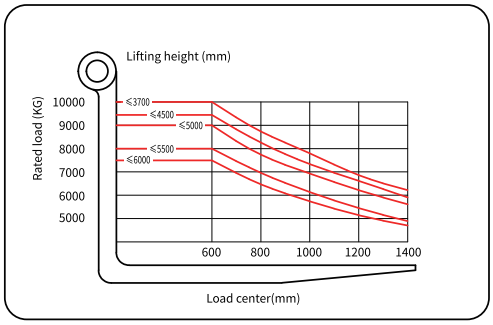
Model	Type	Configuration	Availability	Notes
FEP-80/90/100N2i	Fork length	88×175×2440	○	8 tons, 9 tons, 10 tons
	Valve	3rd valve	●	
		4th valve	○	
	Tilt Cylinder	Tilt cylinder (6/9)	●	
		Tilt cylinder (6/6)	○	
		Tilt cylinder (3/6)	○	
	Comfort pack	Full hydraulic power steering	●	
		Lifting circuit speed-limiting valve	●	
		Human-machine interactive display	●	
		Steering wheel with knob	●	
		Lowering buffer for lifting cylinder	●	
		Side mirrors	●	
		Camera	●	
		USB	●	
		Speeding Voice Alert	○	
	Seats	Normal seat (AH7-2BC with armrest)	●	
		Suspension seat (AH7-2ABC with armrest)	○	
	Reversing Voice	Reversing alarm	○	
		Reversing voice (in Chinese)	●	
		Reversing voice (in English)	○	
		Reverse, Turn, Exceeding Speed Voice Alert (in Chinese)	○	
		Reverse, Turn, Exceeding Speed Voice Alert (in English)	○	
	Other	Labels in Chinese	●	
		Labels in English	○	
		Labels without logos	○	
		On board tool kit	●	

Key: ● Standard · ○ Optional

Mast Data Sheet FEP80/90/100N2i

Designation	Lift height h3(mm)	Free Lift height h2(mm)	Closed mast height h1(mm)	Extended mast height h4(mm)	Tilt forward/ backward α/β(°)	Capacity table(kg) C=600mm standard telescopic fork		
						FEP80N2i	FEP90N2i	FEP100N2i
Two-stage	3000	220	2845	4340	6/9	8000	9000	10000
	3500	220	3095	4840	6/9	8000	9000	10000
	4000	220	3395	5390	6/9	7500	8500	9500
	4500	220	3645	5890	6/6	7500	8500	9500
	5000	220	3895	6390	6/6	6000	7000	8000
	5500	220	4195	6940	3/6	6000	7000	8000
	6000	220	4445	7440	3/6	5500	6500	7500
Three- Stage	4500	1625	2845	5839	6/6	7000	8000	9000
	5000	1795	3015	6341	6/6	5500	6500	7500
	5500	1960	3180	6838	3/6	5500	6500	7500
	6000	2125	3345	7335	3/6	5000	6000	7000

Load curve graph



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LITHIUM BATTERY

LONG LASTING AND SAFE LITHIUM POWER.

NOBLELIFT uses LiFePO4 chemistry — the longest-lasting and safest lithium battery chemistry available. Every battery is equipped with a Battery Management System (BMS), a thermal management system, and an intelligent control system. The BMS monitors all charging and discharging data to keep the battery safe throughout its life cycle.

Our lithium battery packs are backed by a 5-year / 10,000 hour warranty.

Advantages of Lithium Power

	LEAD-ACID BATTERY	LITHIUM BATTERY
PRODUCTIVITY	Lower fleet availability — work is interrupted because the battery must be fully charged before next use.	100% fleet availability — opportunity charging tops the battery up between use.
SERVICE LIFE	Periodic battery replacement.	Lasts up to 3 times longer and doesn't need replacing.
ONGOING MAINTENANCE	Outsourced or in-house maintenance personnel required.	No maintenance cost.
CHARGE DURATION	8–10 hours — 2 or more batteries per machine.	2–3 hours — 1 battery per machine.
BATTERY ROOM	Requires an expensive, ventilated battery room.	No battery room needed.
SAFETY	Releases hydrogen while charging (explosion risk); acid burns possible during maintenance.	No dangerous substances.
POWER SAVINGS	Power loss.	No power loss — reduces energy consumption by up to 35%.



NOBLELIFT
Built for better.

SERVICING, PARTS & SUPPORT.

At Noblelift, we understand that reliable servicing and maintenance are essential to keeping your operation running smoothly. That's why we offer comprehensive support tailored to the needs of your Noblelift fleet. With our commitment to excellence and customer satisfaction, you can trust us to keep your equipment operating at peak performance.

Through our nationwide New Zealand network we can provide:

NATIONAL TECHNICAL SUPPORT

Help by phone or on site, nationwide.

FULLY STOCKED PARTS

Genuine parts held in stock across NZ.

MAINTENANCE & SERVICE CONTRACTS

Flexible plans built around your operation.

DEDICATED SERVICE TEAM

Factory-trained technicians with the product knowledge and diagnostic tools to keep your fleet running.

GENUINE PARTS & ACCESSORIES

A full inventory of genuine Noblelift parts, ready when you need them.

BACK-UP MACHINERY

A rental and support fleet on standby to keep you moving through any downtime.

CUSTOMER TRAINING & SUPPORT

Hands-on operator and maintenance training so your team works safely and efficiently.

SCHEDULED MAINTENANCE PROGRAMS

Proactive, tailored servicing that catches issues early and prevents costly breakdowns.

24/7 EMERGENCY SUPPORT

Round-the-clock help to get you back up and running fast.



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Talk to our team for sales and enquires

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Noblelift New Zealand.