



# EFX4-301

## LI-ION COUNTERBALANCE FORKLIFT WITH MANUAL-SWAP BATTERY PACKS 3.0T

3000 kg 6000 mm 80 V



The EFL302X4 is ideal for logistics companies, construction sites, and rental fleets that need dependable power in areas with limited charging infrastructure. Its swappable modular batteries allow uninterrupted operation by rotating charged packs, while the optional multi-battery charging station provides a convenient plug-and-play charging solution. Suitable for outdoor and off-grid environments, it combines the endurance of IC forklifts with the sustainability of electric power.

SPECIFICATION	REF	UNIT	VALUE
Battery nominal capacity		Ah	200
Battery voltage		V	80
Load capacity	Q	kg	3000
Load centre distance	c	mm	500
Service weight		kg	4378
Retracted mast height	$h_1$	mm	2070
Lift height	$h_3$	mm	3000
Height, mast extended	$h_4$	mm	4130
Overall length		mm	3735
Overall width	$b_1/b_2$	mm	1228
Length to face of forks	l <sub>2</sub>	mm	2665
Fork dimensions	s/e/l	mm	45×122×1070
Turning radius		Wa	2428
Operator type			Seated
Load distance, centre of drive axle to fork		mm	486
Wheelbase		mm	1760

# Features

## Manual-swap modular batteries

Lightweight 26 kg Li-ion battery packs can be manually replaced in seconds, eliminating downtime and enabling 24/7 operation. The side-access design simplifies handling and reduces maintenance requirements, making it ideal for rental and mobile applications.



**PLUG-AND-PLAY SOLUTION:**  
MODULAR BATTERY PACKS CHARGING STATION

## Remote charging and optional station

The EFL302X4 supports off-site charging — batteries can be removed and charged separately using an optional six-slot charging station. This modular approach ensures operational safety, flexibility, and continuous power availability even without fixed infrastructure.

## Advanced power and control system

Equipped with an 80V/100Ah lithium system, smart BMS, and PMS motor, the EFL302X4 ensures optimal energy efficiency, smooth acceleration, and extended runtime. Its powertrain reduces energy consumption and supports consistent performance across shifts.



## Ergonomic design and visibility

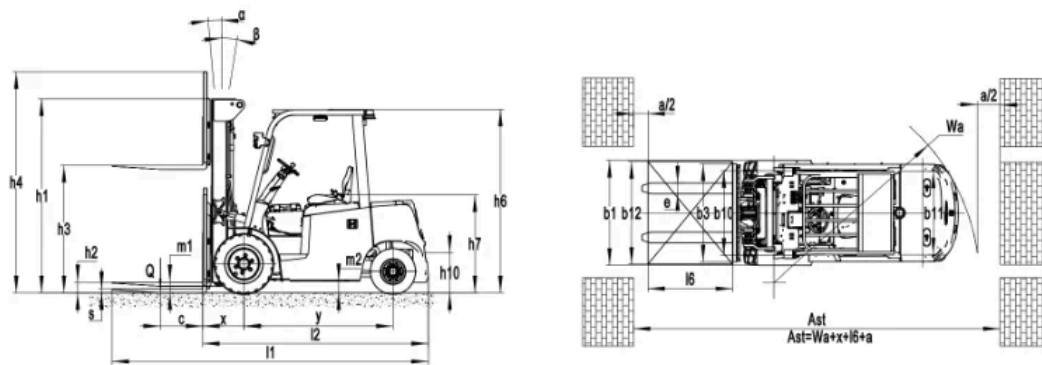
A redesigned operator cabin with a high-visibility mast, LED front lighting, wider brake pedal, and adjustable seat enhances safety and comfort during long operations. Every detail is designed to boost precision, control, and operator satisfaction.

# VDI Chart

	SPECIFICATION	REF	UNIT	VALUE
1.4	Operator type			Seated
1.5	Load capacity	Q	kg	3000
1.6	Load centre distance	c	mm	500
1.8	Load distance, centre of drive axle to fork		mm	486
1.9	Wheelbase		mm	1760
2.1	Service weight		kg	4378
2.2	Axle loading, laden front/rear		kg	6554/824
2.3	Axle loading, unladen front/rear		kg	1873/2505
3.1	Tyre type			Pneumatic
3.2	Tyre size, front		mm	28X9-15-14PR
3.3	Tyre size, rear		mm	6.50-10-10PR
3.5	Wheels, number front/rear (x=drive wheels)			2x/2
3.6.1	Tread width, front	$b_{10}$	mm	989
3.7.1	Tread width, rear	$b_{11}$	mm	980
4.0	Max lift height	H	mm	6000
4.1	Tilt of mast/fork carriage forward/backward		°	6/10
4.12	Tow coupling height		mm	468
4.13	Loading height, unladen			2070
4.14	Stand height, elevated			3000
4.15	Lowered height			4130
4.16	Length of loading surface			3735
4.18	Width of loading surface			1228
4.19	Overall length		mm	3735
4.2	Retracted mast height	$h_1$	mm	2070
4.2.1	Overall height			2143
4.20	Length to face of forks	l <sub>2</sub>	mm	2665
4.21	Overall width	$b_1/b_2$	mm	1228
4.22	Fork dimensions	s/e/l	mm	45×122×1070
4.23	A,B Fork carriage class/type A, B			3A
4.24	Fork carriage width		mm	1100
4.3	Free lift		mm	130
4.31	Ground clearance, laden, below mast		mm	125

SPECIFICATION		REF	UNIT	VALUE
4.32	Ground clearance, centre of wheelbase		mm	157
4.34.1	Aisle width for pallets 1000×1200 crossways		Ast	4115
4.34.2	Aisle width for pallets 800×1200 lengthways		Ast	4315
4.35	Turning radius		Wa	2428
4.36	Internal turning radius			2428
4.4	Lift height	h <sub>3</sub>	mm	3000
4.5	Height, mast extended	h <sub>4</sub>	mm	4130
4.7	Height of overhead guard (cabin)		mm	2143
4.8	Seat height/standing height		mm	1141
5.1	Travel speed, laden/unladen		km/h	11/12
5.10	Service brake			Hydraulic
5.11	Parking brake			Mechanical
5.2	Lifting speed, laden/unladen		m/s	0.29/0.36
5.3	Lowering speed, laden/unladen		m/s	0.4/0.4
5.5	Drawbar pull, laden/unladen			6554/824
5.6	Max. drawbar pull, laden/unladen			6554/824
5.8	Max. gradeability, laden/unladen		%	15/15
6.1	Drive motor rating S2 60 min		kW	10
6.2	Lift motor rating at S3 15%		kW	16
6.4	Battery nominal capacity		Ah	200
6.4	Battery voltage		V	80
6.5	Battery weight		kg	4378
6.6	Energy consumption according to DIN EN 16796		kWh/h	unknown
6.7	Turnover output according to VDI 2198			Turnover output according to VDI 2198
6.8	Turnover efficiency according to VDI 2198			Turnover efficiency according to VDI 2198
8.1	Type of drive control			PMSM
10.5	Steering design			Hydraulic
10.7	Sound pressure level at the drivers ear		dB(A)	<74
15.1	Charger output current		A	unknown

# VDI Drawing



## Mast Options

MAST TYPE	LIFT HEIGHT (H3, MM)	MAST LOWERED HEIGHT (H1, MM)	HEIGHT, MAST EXTENDED, NO SHELIVING (H4, MM)	HEIGHT, MAST EXTENDED, WITH SHELIVING (H4, MM)	HEIGHT, FREE LIFT, NO SHELIVING (H2, MM)	HEIGHT, FREE LIFT, WITH SHELIVING (H2, MM)
2-Standard Mast	2700	1910	3300	3795	120	120
2-Standard Mast	3000	2060	3630	4095	120	120
2-Standard Mast	3300	2210	3930	4395	120	120
2-Standard Mast	3500	2310	4130	4595	120	120
2-Free Mast	3600	2360	4230	4695	120	120
2-Free Mast	4000	2610	4630	5095	120	120
2-Free Mast	4300	2760	4930	5395	120	120
2-Free Mast	4500	2860	5130	5595	120	120
2-Free Mast	3000	2040	3630	4095	1410	945
2-Free Mast	3300	2190	3930	4395	1560	1095
2-Free Mast	3600	2340	4230	4695	1710	1245
3-Free Mast	4300	2040	4930	5395	1410	945
3-Free Mast	4500	2120	5130	5595	1490	1025
3-Free Mast	4800	2225	5430	5895	1595	1130
3-Free Mast	5000	2310	5630	6095	1680	1215

MAST TYPE	LIFT HEIGHT (H3, MM)	MAST LOWERED HEIGHT (H1, MM)	HEIGHT, MAST EXTENDED, NO SHELVING (H4, MM)	HEIGHT, MAST EXTENDED, WITH SHELVING (H4, MM)	HEIGHT, FREE LIFT, NO SHELVING (H2, MM)	HEIGHT, FREE LIFT, WITH SHELVING (H2, MM)
3-Free Mast	5500	2560	6130	6595	1930	1465
3-Free Mast	6000	2810	6630	7095	2180	1715

## Options

ITEM	OPTIONS (optional items marked in yellow)
Fork dimension	122*40*920   122*40*1070   122*40*1150   122*40*1220   122*40*1370   122*40*1500   122*40*1600   122*40*1700   122*40*1820   122*40*1900   122*40*2000   122*40*2200
Seat type	Comfortable with safety belt switch   Seat with armrest with safety belt switch
Attachments	Built-in sideshifter   External shifter
Traction pin	Yes and not customized
Front wheel material	Pneumatic   Solid   Non-marking
Rear wheel material	Pneumatic   Solid   Non-marking
Battery capacity	80V100AH   80V200AH
Charger	80V65A (for 100AH battery)   80V100A (for 200AH battery)
Charging station	Charging station (6 charging slots, 24V/50A each)
Battery display indicator (BDI)	With hourmeter Bluetooth without PSE
Area warning lamp	No   Both sides   Both sides and rear
Rearview mirror	One in front   Two on sides and one in front
Buzzer	Yes and not customized
OPS system	Yes and not customized
USB interface	Yes and not customized
Telematics	Yes and not customized   No
Front lamp	LED
Rear lamp	No   LED
Warning lamp	Yes and not customized
Blue lamp	No   Rear   Front and rear
Cabin	No
Overhead guard	No   With tempered glass
Turn speed control	No

ITEM	OPTIONS (optional items marked in yellow)
Heating system during lithium battery charging	No   Yes and not customized
Operator identification device	No   Card reader device
Hydraulic control	Mechanical lever
Rear armrest horn	No   Yes and not customized