

EFL1603-HV/EFL1803-HV

High Capacity Electric Counterbalanced Forklift 16-18T



Manufacturer			EP	EP	EP	EP	EP
Model designation			EFL1603-HV-6	EFL1603-HV-9	EFL1603-HV-12	EFL1803-HV-9	EFL1803-HV-12
Drive			Electric	Electric	Electric	Electric	Electric
Load capacity	Q	kg	16000	16000	16000	16000	18000
Load center distance	c	mm	600	900	1200	1200	1200
Service weight		kg	23380	23580	24100	24100	26800
Retracted mast height	h1	mm	3640	3640	3640	3700	3700
Lift height	h3	mm	4000	4000	4000	4000	4000
Height, mast extended	h4	mm	5600	5600	5600	5660	5660
Length to face of forks	l2	mm	4895	5195	5550	5550	5550
Overall width	b1/b2	mm	2530	2530	2530	2530	2530
Fork dimensions	s/e/l	mm	80/200/1200	90/220/1800	100/250/2400	100/250/1800	110/250/2400
Turning radius	Wa	mm	4650	4950	5175	5175	5175
Travel speed, laden/unladen		km/h	20/20	20/20	20/20	20/20	20/28
Lifting speed, laden/unladen		m/s	0.35/0.4	0.35/0.4	0.4/0.45	0.35/0.4	0.4/0.45
Lowering speed, laden/unladen		m/s	0.5/0.35	0.5/0.35	0.5/0.4	0.5/0.35	0.5/0.4
Drive motor rating S2 60 min		kW	90	90	90	90	90
Battery voltage/nominal capacity		V/Ah	618.24/228	618.24/228	618.24/228	618.24/228	618.24/228

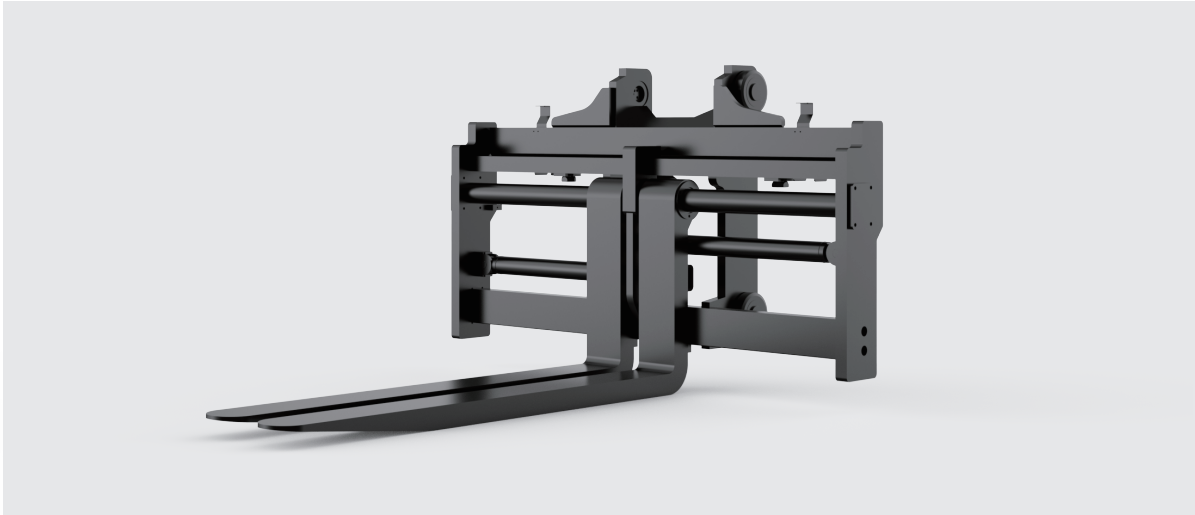
Standard Configuration

- Roller guiden forks 1800/2440mm forks
- Fork positioner with sideshift
- 2500 fork carriage
- 618.24V/228AhLFP battery
- Battery heating function when charging
- Telematics
- Fingertips
- Grammer 85/722 Suspension seat with armrest, heating and OPS
- Pneumatic tyres (solid tyres for certain markets)
- All weather cabin with rubber damping frame connection, heater and air conditioner, defrost and defogging function and elector-hydraulic tilting function
- Mast lifting and lowering buffer
- Fire extinguisher holder
- USB interface 24V
- Reversing buzzer
- Back distance sensor and rear camera with LCD display
- Lighting package: LED front working light (with far and near light, steering light, width light), LED working light on mast, LED tricolor taillights, LED rear working light (with reversing light, brake light, steering light, width light), Strobe warning light
- OPS system

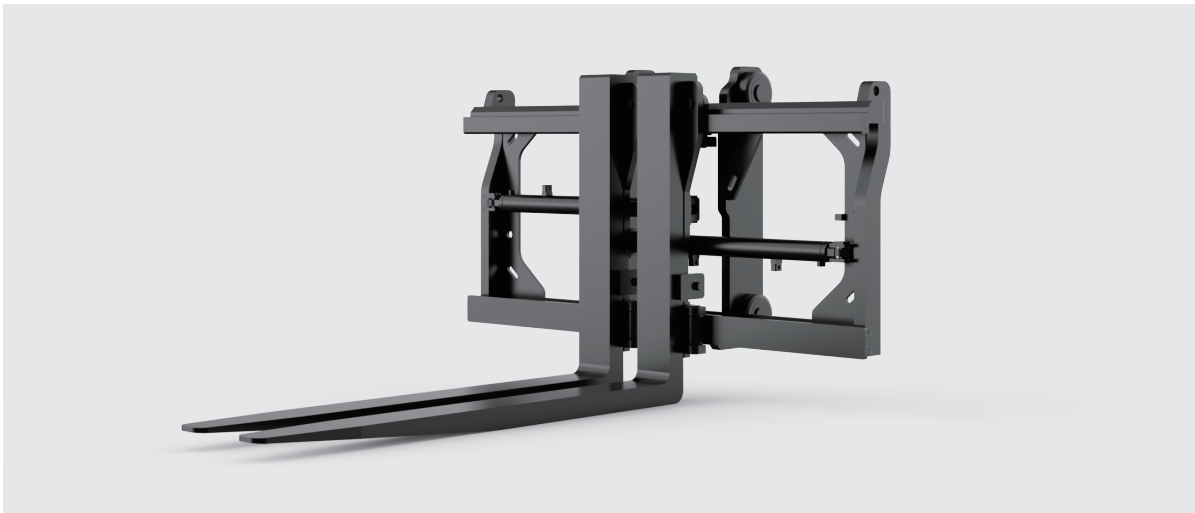
Options

- Different fork length customization
- Customized fork carriage (width and type)
- Attachments:
 - Fork positioner with sideshift: Forks with terminal west
 - Fork positioner with sideshift: Pin type forks
- Chargers
 - 20kw (3 phase AC 370V-460V, 50-60HZ, 32A plug)
 - 40kw (3 phase AC 370V-460V, 50-60HZ, 63A plug)
- Solid tyres / non marking tyres
- Reverse voice horn (English)
- Lights
 - Rotating warning light / rotating buzzer warning light
 - Front blue spots on mast
 - Rear blue spots on counterweight
 - Area steering lights on both side (red)
- Cigarette lighter interface 12V5A
- Turning speed limit function

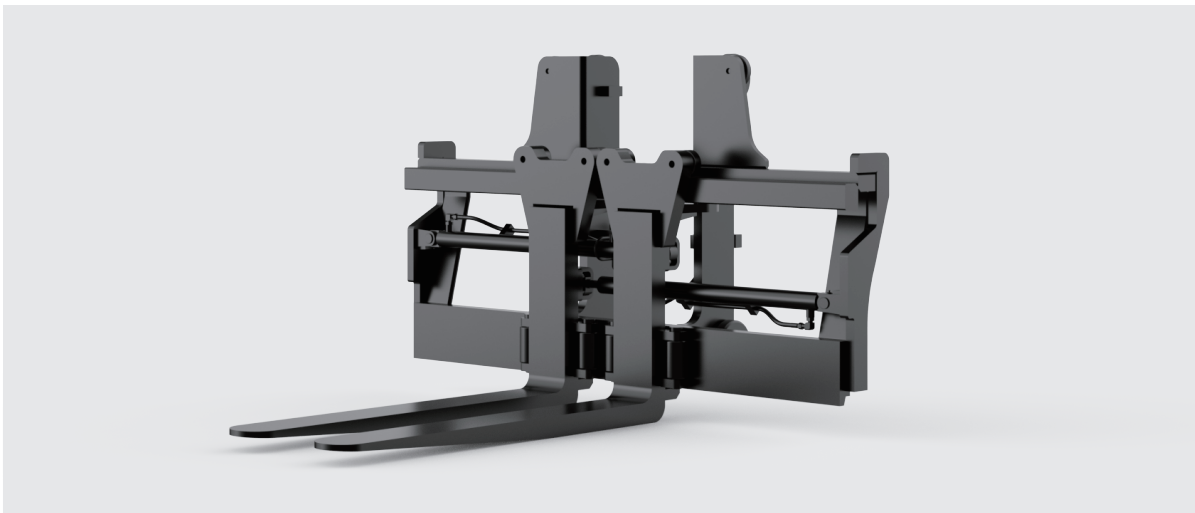
01 fork positioner with pin type forks



02 fork positioner with sideshift forks with terminal west



03 fork positioner with sideshift roller guiden forks



High Capacity Electric Counterbalanced Forklift 16T

EFL1603-HV

Distinguishing mark	1.1	Manufacturer			EP	EP	EP
	1.2	Model designation			EFL1603-HV-6	EFL1603-HV-9	EFL1603-HV-12
	1.3	Drive			Electric	Electric	Electric
	1.4	Operator type			Seated	Seated	Seated
	1.5	Load capacity	Q	kg	16000	16000	16000
	1.6	Load center distance	c	mm	600	900	1200
	1.8	Load distance, centre of drive axle to fork	x	mm	1010	1020	1030
	1.9	Wheelbase	y	mm	3130	3500	3750
Service weight	2.1	Service weight		kg	23380	23580	24100
	2.2	Axle loading, laden front/rear		kg	36600/2780	36800/2780	37070/3030
	2.3	Axle loading, unladen front/rear		kg	11580/11800	11580/12000	11800/12300
Tyres/chassis	3.1	Tyre type			Pneumatic	Pneumatic	Pneumatic
	3.2	Tyre size, front			12.00-20-20PR	12.00-20-20PR	12.00-20-20PR
	3.3	Tyre size, rear			12.00-20-20PR	12.00-20-20PR	12.00-20-20PR
	3.5	Wheels, number front/rear (x=drive wheels)		mm	4×/2	4×/2	4×/2
	3.6	Tread width, front	b ₁₀	mm	1880	1880	1880
Dimensions	3.7	Tread width, rear	b ₁₁	mm	2200	2200	2200
	4.1	Tilt of mast/fork carriage forward/backward	α/β	°	6/12	6/12	6/12
	4.2	Retracted mast height	h ₁	mm	3640	3640	3640
	4.3	Free lift	h ₂	mm	100	100	100
	4.4	Lift height	h ₃	mm	4000	4000	4000
	4.5	Height, mast extended	h ₄	mm	5600	5600	5600
	4.7	Height of overhead guard (cabin)	h ₆	mm	3160	3160	3160
	4.8	Seat height/standing height	h ₇	mm	2000	2000	2000
	4.12	Tow coupling height	h ₁₀	mm	430	430	430
	4.19	Overall length	l ₁	mm	6115	7015	7950
	4.20	Length to face of forks	l ₂	mm	4895	5195	5550
	4.21	Overall width	b ₁ /b ₂	mm	2530	2530	2530
	4.22	Fork dimensions	s×e×l	mm	80/200/1200	90/220/1800	100/250/2400
	4.24	Fork carriage width	b ₃	mm	2500	2500	2500
	4.31	Ground clearance, laden, below mast	m ₁	mm	155	155	155
	4.32	Ground clearance, center of wheelbase	m ₂	mm	300	300	265
	4.34.1	Aisle width for pallets 1000×1200 crossways	Ast	mm	7020	7920	8725
	4.34.2	Aisle width for pallets 800×1200 lengthways	Ast	mm	7020	7920	8725
	4.35	Turning radius	Wa	mm	4650	4950	5175
Performance data	5.1	Travel speed, laden/unladen		km/h	20/20	20/20	20/20
	5.2	Lifting speed, laden/unladen		m/s	0.35/0.4	0.35/0.4	0.4/0.45
	5.3	Lowering speed, laden/unladen		m/s	0.5/0.35	0.5/0.35	0.5/0.4
	5.5	Drawbar pull, laden/unladen		N	92000/92000	92000/92000	92000/92000
	5.6	Max. drawbar pull, laden/unladen		N	95000/95000	95000/95000	95000/95000
	5.8	Max. gradeability, laden/unladen		%	20/30	20/30	20/30
	5.10	Service brake			Hydraulic	Hydraulic	Hydraulic
Electric-engine	5.11	Parking brake			Hydraulic	Hydraulic	Hydraulic
	6.1	Drive motor rating S2 60 min		kW	90	90	90
	6.2	Lift motor rating at S3 15%		kW	60	60	60
	6.4	Battery voltage/nominal capacity		V/Ah	618.24/228	618.24/228	618.24/228
	6.5	Battery weight		kg	932	932	932
	6.6	Energy consumption according to DIN EN 16796		kWh/h	20.9	20.9	20.9
Addition data	8.1	Type of drive control			PMSM	PMSM	PMSM
	10.1	Operating pressure for attachments		bar	180	180	180
	10.2	Oil volume for attachments		ℓ/min	60	60	80
	10.5	Steering design			Hydraulic	Hydraulic	Hydraulic
	10.7	Sound pressure level at the driver's ear		dB(A)	<75	<75	<75
	15.1	Charger output current		A	115	115	115

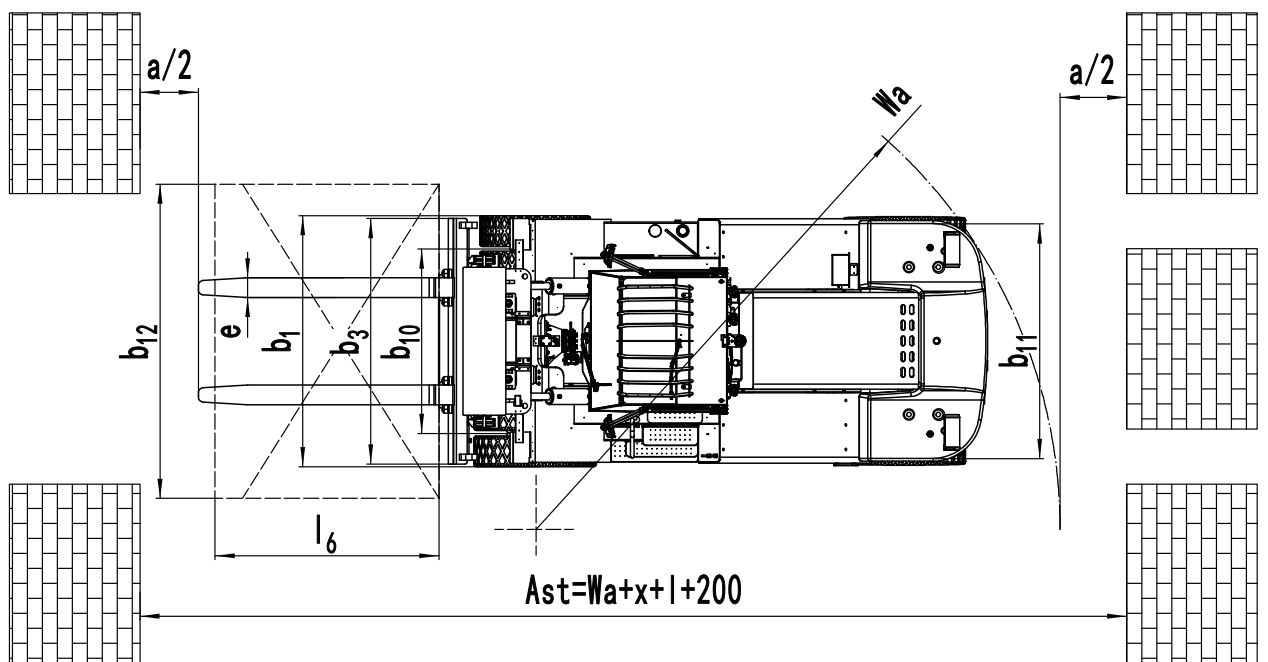
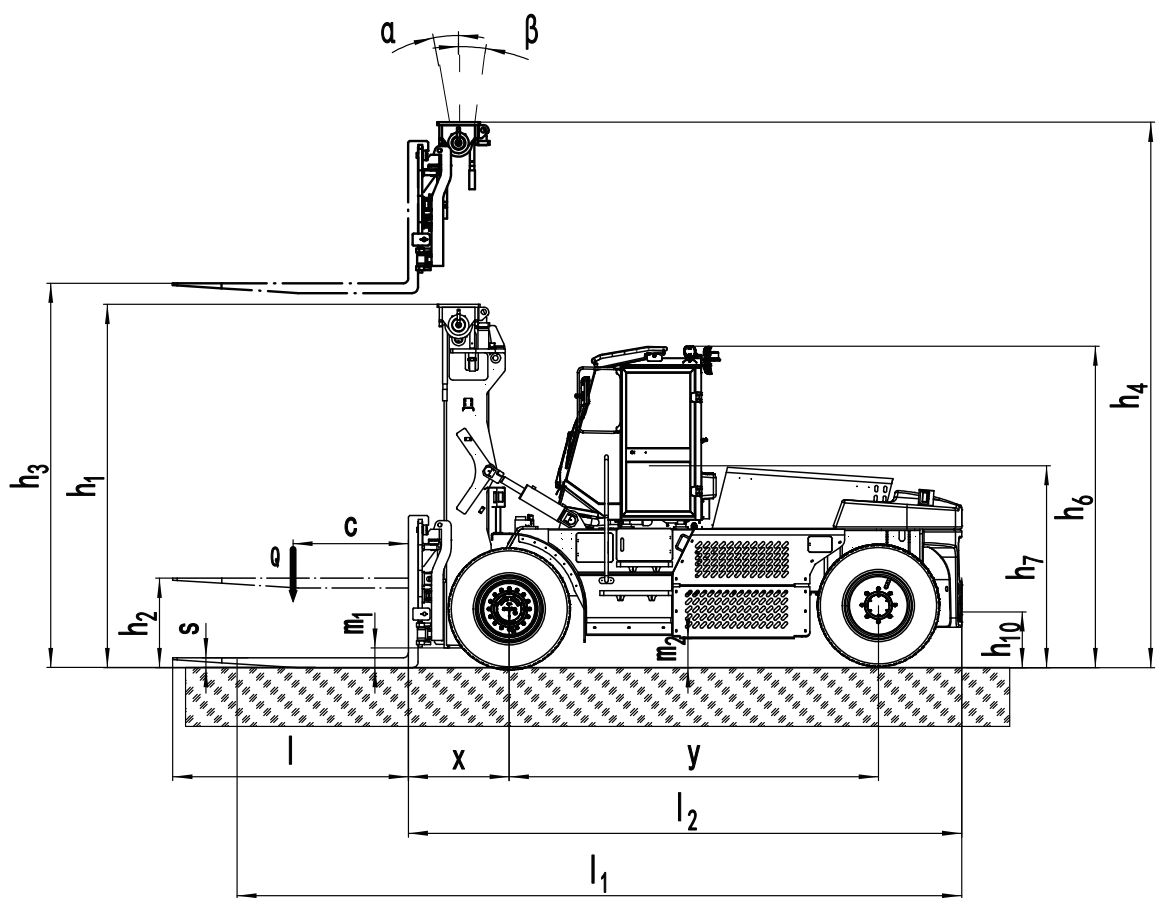
If there are improvements of technical parameters or configurations, no further notice will be given.
The diagram shown may contain non-standard configurations.

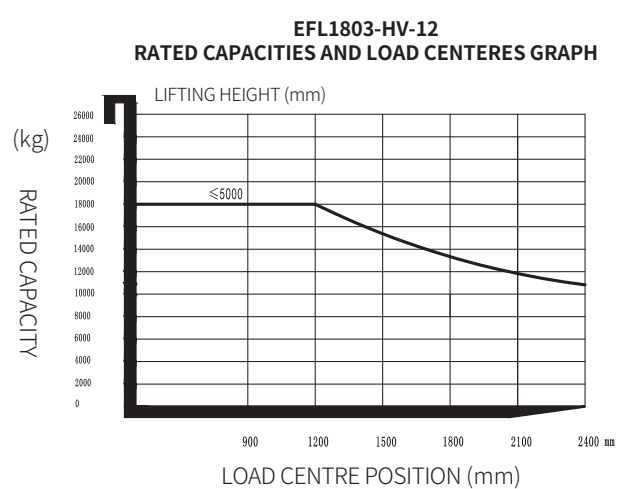
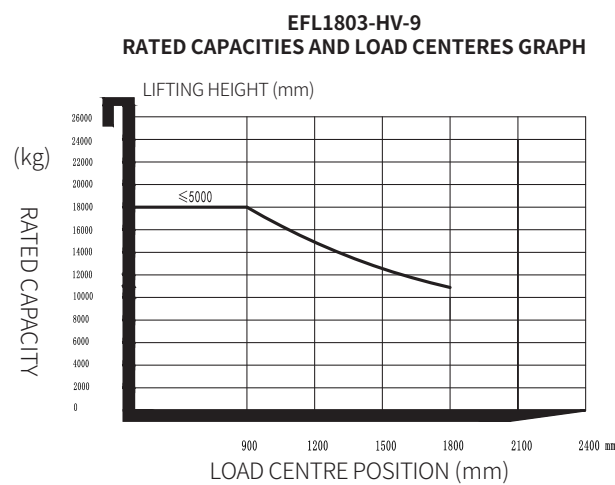
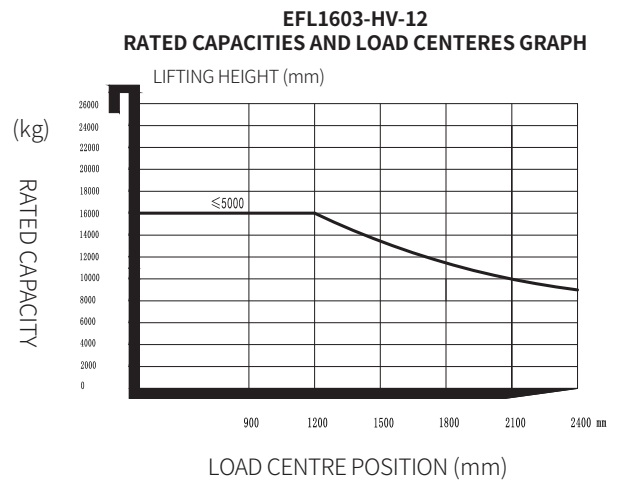
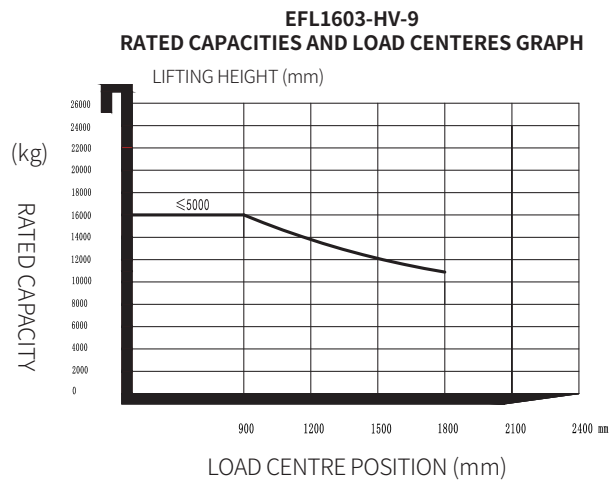
Li-ion High Capacity Truck 18T

EFL1803-HV

Distinguishing mark	1.1	Manufacturer			EP	EP
	1.2	Model designation			EFL1803-HV-9	EFL1803-HV-12
	1.3	Drive			Electric	Electric
	1.4	Operator type			Seated	Seated
	1.5	Load capacity	Q	kg	18000	18000
	1.6	Load center distance	c	mm	900	1200
	1.8	Load distance, centre of drive axle to fork	x	mm	1030	1040
	1.9	Wheelbase	y	mm	3750	3750
Service weight	2.1	Service weight		kg	24100	26800
	2.2	Axle loading, laden front/rear		kg	38770/3330	41470/3330
	2.3	Axle loading, unladen front/rear		kg	11800/12300	12500/14300
Tyres/chassis	3.1	Tyre type			Pneumatic	Pneumatic
	3.2	Tyre size, front			12.00-24-24PR	12.00-24-24PR
	3.3	Tyre size, rear			12.00-24-24PR	12.00-24-24PR
	3.5	Wheels, number front/rear (x=drive wheels)		mm	4×/2	4×/2
	3.6	Tread width, front	b ₁₀	mm	1880	1880
	3.7	Tread width, rear	b ₁₁	mm	2200	2200
	3.7	Tread width, rear				
Dimensions	4.1	Tilt of mast/fork carriage forward/backward	α/β	°	6/12	6/12
	4.2	Retracted mast height	h ₁	mm	3700	3700
	4.3	Free lift	h ₂	mm	110	110
	4.4	Lift height	h ₃	mm	4000	4000
	4.5	Height, mast extended	h ₄	mm	5660	5660
	4.7	Height of overhead guard (cabin)	h ₆	mm	3220	3220
	4.8	Seat height/standing height	h ₇	mm	2050	2050
	4.12	Tow coupling height	h ₁₀	mm	430	430
	4.19	Overall length	l ₁	mm	7370	7950
	4.20	Length to face of forks	l ₂	mm	5550	5550
	4.21	Overall width	b ₁ /b ₂	mm	2530	2530
	4.22	Fork dimensions	s×e×l	mm	100/250/1800	110/250/2400
	4.24	Fork carriage width	b ₃	mm	2500	2500
	4.31	Ground clearance, laden, below mast	m ₁	mm	165	165
	4.32	Ground clearance, center of wheelbase	m ₂	mm	265	265
	4.34.1	Aisle width for pallets 1000×1200 crossways	Ast	mm	8145	8725
	4.34.2	Aisle width for pallets 800×1200 lengthways	Ast	mm	8145	8725
	4.35	Turning radius	Wa	mm	5175	5175
Performance data	5.1	Travel speed, laden/unladen		km/h	20/20	20/28
	5.2	Lifting speed, laden/unladen		m/s	0.35/0.4	0.4/0.45
	5.3	Lowering speed, laden/unladen		m/s	0.5/0.35	0.5/0.4
	5.5	Drawbar pull, laden/unladen		N	92000/92000	92000/92000
	5.6	Max. drawbar pull, laden/unladen		N	95000/95000	95000/95000
	5.8	Max. gradeability, laden/unladen		%	20/30	20/30
	5.10	Service brake			Hydraulic	Hydraulic
	5.11	Parking brake			Hydraulic	Hydraulic
Electric-engine	6.1	Drive motor rating S2 60 min		kW	90	90
	6.2	Lift motor rating at S3 15%		kW	60	60
	6.4	Battery voltage/nominal capacity		V/Ah	618.24/228	618.24/228
	6.5	Battery weight		kg	932	932
	6.6	Energy consumption according to DIN EN 16796		kWh/h	20.9	20.9
	8.1	Type of drive control			PMSM	PMSM
Addition data	10.1	Operating pressure for attachments		bar	180	180
	10.2	Oil volume for attachments		ℓ/min	80	80
	10.5	Steering design			Hydraulic	Hydraulic
	10.7	Sound pressure level at the driver's ear		dB(A)	<75	<75
	15.1	Charger output current		A	115	115

If there are improvements of technical parameters or configurations, no further notice will be given.
The diagram shown may contain non-standard configurations.





Mast Option

EFL1603-HV

Mast types	Lift height (h3)	Height, Mast			Height, Free lift(h2)	
		Height, mast lowered(h1)	Height, mast extended(h4)		No backrest	With backrest
			No backrest	With backrest		
	mm	mm	mm	mm	mm	mm
2-Standard Mast	3500	3380	5080	5080	100	100
	4000	3640	5600	5600	100	100
	4200	3690	5740	5740	100	100
	4500	3840	6040	6040	100	100
	5000	4090	6540	6540	100	100
3-Free Mast	4500	3070	6070	—	1500	—
	4710	3140	6280	—	1570	—
	5000	3237	6570	—	1667	—
	5500	3403	7070	—	1833	—
	6000	3570	7570	—	2000	—
	6500	3737	8070	—	2167	—
	7000	3903	8570	—	2333	—

EFL1803-HV

Mast types	Lift height (h3)	Height, Mast			Height, Free lift(h2)	
		Height, mast lowered(h1)	Height, mast extended(h4)		No backrest	With backrest
			No backrest	With backrest		
	mm	mm	mm	mm	mm	mm
2-Standard Mast	3500	3440	5140	5140	110	110
	4000	3700	5660	5660	110	110
	4200	3750	5800	5800	110	110
	4500	3900	6100	6100	110	110
	5000	4150	6600	6600	110	110
3-Free Mast	4500	3130	6130	—	1500	—
	4710	3200	6340	—	1570	—
	5000	3297	6630	—	1667	—
	5500	3463	7130	—	1833	—
	6000	3630	7630	—	2000	—
	6500	3797	8130	—	2167	—
	7000	3963	8630	—	2333	—