

High performance trucks with low energy consumption

Electric hydraulic steering for improved operator comfort

Sideways battery removal with SnapFit

Quickly and intuitively adaptable operating concept

Operator-oriented storage design

5 individually adjustable operating programs



EFG 213/215/216k/216/218k/218/220

Electric three-wheel truck (1.300/1.500/1.600/1.800/2.000 kg)

Our Pure Energy technology concept enables us to achieve the best possible energy efficiency coupled with maximum performance.

By using the most advanced 3-phase AC technology in combination with an efficient and compact hydraulic unit, we have been able to significantly reduce energy consumption – while simultaneously increasing throughput. This is verified by tests as per the VDI cycle:

At full throughput, our new EFG 2/3 series consumes up to 15% less energy than a comparable competitor's model. Working programs with variable travel/lift speeds will complete your transport and stacking operations with maximum energy efficiency.

The infinitely adjustable steering column and armrest allow for adjustment to suit all operator sizes.

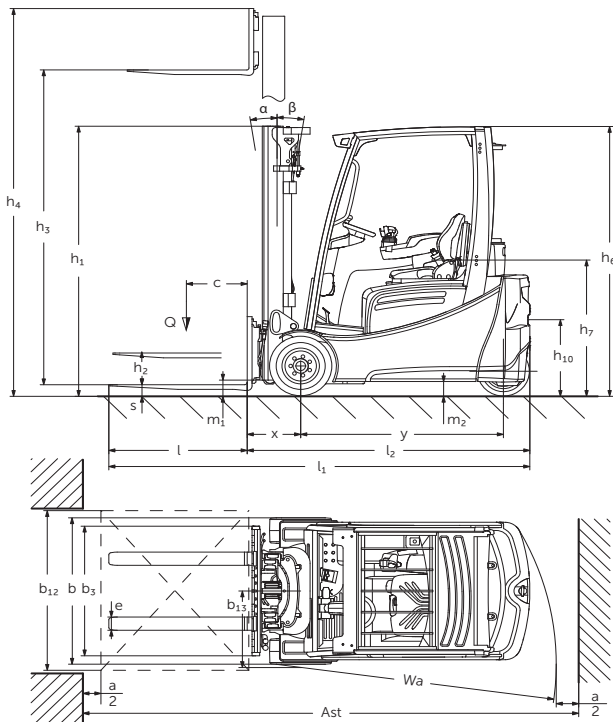
The individual adjustment of the controls is very easy to carry out thanks to the single-point adjustment via two adjustable axes.

Changing the battery is simple and easy: the choice of three different battery changing options makes this easy for any user – even during three-shift operations

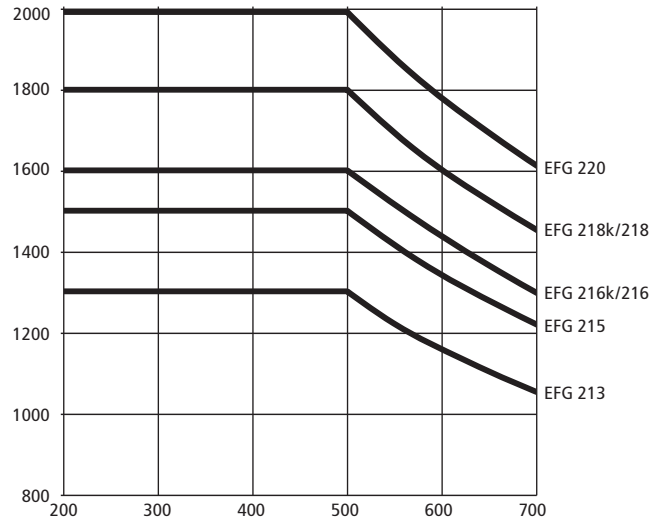
The robust truck construction, user-friendly design and innovative technology ensures long term reliability.

- Robust construction with steel bumpers, steel bonnet and protected lights.
- Enclosed chassis – even under the battery – for added stability and protection.
- Maintenance-free components (e.g. brakes and transmission).
- Innovative technology with halogen bulbs and LEDs.

EFG 213/215/216k/216/218k/218/220



Capacity
Load centre distance "C" in mm



Description	Lift height h3 mm	Mast table EFG 213/215/216k/216/218k/218/220						Tilt forward / backward a/β (°)	Capacity table (kg) c = 500 mm without sideshift, single solid tyres				
		Closed height h1 mm		Free lift h2 mm		Extended height h4 mm			EFG 213	EFG 215	EFG 216k / 216	EFG 218k / 218	EFG 220
		EFG 213/ 215/216k 216	EFG 218k/ 218/ 220	EFG 213/ 215/216k 216	EFG 218k/ 218/ 220	EFG 213 / 216k	EFG 218k / 218 / 220						
Two-stage mast ZT	3000	2060	2067	150	150	3490	3612	7/6	1300	1500	1600	1800	2000
	3100	2110	2117	150	150	3690	3712	7/6	1300	1500	1600	1800	2000
	3300	2210	2217	150	150	3890	3912	7/7	1300	1500	1600	1800	2000
	3500	2310	2317	150	150	4090	4112	7/7	1300	1500	1600	1800	2000
	3700	2410	2417	150	150	5290	4312	7/7	1300	1500	1600	1800	2000
	4000	2560	2567	150	150	4590	4612	7/7	1300	1500	1600	1800	2000
Two stage mast ZZ	4500	2810	2817	150	150	5090	5112	7/7	1300	1500	1600	1800	2000
	3100	2065	2172	1475	1430	3690	3742	7/6	1300	1500	1600	1800	2000
	3300	2165	2272	1575	1470	3890	3822	7/7	1300	1500	1600	1800	2000
	3500	2265	2372	1675	1530	4090	3942	7/7	1300	1500	1600	1800	2000
	3700	2365	2472	1775	1630	4290	4141	7/7	1300	1500	1600	1800	2000
Three-stage mast DZ	4000	2515	2622	1925	1730	4590	4342	7/7	1300	1500	1600	1800	2000
	4400	2025	2032	1435	1390	4990	5042	7/7	1300	1500	1600	1800	2000
	4640	2105	2112	1515	1470	5230	5282	7/6	1300	1500	1600	1800	2000
	5000	2235	2242	1645	1600	5590	5642	7/5	1300	1500	1600	1800	2000
	5500	2415	2422	1825	1780	6090	6142	7/5	1050	1350	1350	1500	1600
	6000	2585	2592	1995	1950	6590	6642	7/5	900	1250	1150	1300	1400
6500	2765	2772	2175	2130	7090	7142	7/5	750	0	950	1100	1150	

Technical data in line with VDI 2198

as at 11/2014

		Jungheinrich								
		EFG 213	EFG 215	EFG 216k	EFG 216	EFG 218k	EFG 218	EFG 220		
1.1	Manufacturer (abbreviation)	Jungheinrich								
1.2	Model									
Identification	1.3	Drive	Elektro					seat		
	1.4	Operator type								
	1.5	Load capacity/rated load	Q (t)	1,3	1,5	1,6	1,8	2,0		
	1.6	Load centre distance	c (mm)	500						
	1.8	Load distance, centre of drive axle to fork	x (mm)	339		344		364		
Weights	1.9	Wheelbase	y (mm)	1249		1357		1465		
	2.1	Service weight incl. battery (see line 6.5)	kg	2692	2937	2959	3018	3240	3366	
	2.2	Axle loading, laden front/rear	kg	3534/458	3860/577	4043/516	4050/566	4457/583	4477/514	
	2.3	Axle loading, unladen front/rear	kg	1307/1385	1290/1647	1392/1567	1479/1539	1423/21817	1534/1657	
	2.3	Axle loading, unladen front/rear	kg	1307/1385		1290/1647		1392/1567		
Wheels, Chassis	3.1	Tyres	SE(L) / SE(L)		SE(L) / SE(L)		SE / SE			
	3.2	Tyre size, at front	18x7-8		18x7-8		200 / 50-10			
	3.3	Tyre size, at rear	140 / 55-9		140 / 55-9		140 / 55-9			
	3.5	Wheels, number front/rear (x = driven wheels)	2x / 2		2x / 2		2x / 2			
	3.6	Track width, front	b ₁₀ (mm)	904		904		914		
3.7	Track width, rear	b ₁₁ (mm)	176							
Basic Dimensions	4.1	Tilt of mast/fork carriage forward/backward	a/β (°)	7° / 7°						
	4.2	Mast height (lowered)	h ₁ (mm)	2060		2060		2067		
	4.3	Free lift	h ₂ (mm)	150						
	4.4	Lift	h ₃ (mm)	3000		3000		3000		
	4.5	Extended mast height	h ₄ (mm)	3590		3590		3612		
	4.7	Height of overhead guard	h ₆ (mm)	2040		2040		2040		
	4.8	Seat height/stand height	h ₇ (mm)	920		920		920		
	4.12	Coupling height	h ₁₀ (mm)	560		560		560		
	4.19	Total length including fork length	l ₁ (mm)	2924		3037 3145		3037 3145		
	4.20	Länge einschl. Gabelrücken	l ₂ (mm)	1774		1887 1995		1887 1995		
	4.21	Total width	b ₁ (mm)	1060		1060		1120		
	4.22	Fork dimensions	s/e/l (mm)	35x100x1150		40x100x1150		40x100x1150		
	4.23	Fork carriage ISO 2328, class/type A, B		2A		2A		2A		
	4.24	Fork carriage width	b ₃ (mm)	980		980		980		
	4.31	Floor clearance with load under mast	m ₁ (mm)	97		97		105		
4.32	Floor clearance centre wheelbase	m ₂ (mm)	100		100		100			
4.33	Aisle width for pallets 1000 x 1200 sideways	Ast (mm)	3104		3216 3323		3216 3323			
4.34	Aisle width for pallets 800 x 1200 lengthways	Ast (mm)	3226		3339 3446		3339 3446			
4.35	Turning radius	Wa (mm)	1440		1548 1655		1548 1655			
4.36	Smallest pivot point distance	b ₁₃ (mm)	0		0		0			
Performance Data	5.1	Travel speed laden/unladen	km/h	16,0		16,0		16,0		
	5.2	Lift speed, laden/unladen	m/s	0,48/0,60 0,46/0,60		0,49/0,60		0,44/0,55		
	5.3	Lowering speed laden/unladen	m/s	0,55		0,55		0,55		
	5.5	Drawbar pull laden/unladen s2 60 min.	N	2300/2500 2200/2450		2150/2450 2100/2450		2000/2300		
	5.6	Max. drawbar pull laden/unladen s2 5 min.	N	12700/12700		12700/12700		12400/12200		
	5.7	Gradeability laden/unladen s2 30 min.	%	7,6/12,5 7,3/12,3		7,3/12,3 7,0/11,5		6,2/10,7 5,9/10,5		
	5.8	Max. gradeability laden/unladen S2 5 min.	%	28 /35 27/35		27/35		26/35 25/35		
	5.9	Acceleration time laden/unladen (over 10 m)	s	3,6/3,2 3,8/3,4		3,8/3,4		3,9/3,5		
	5.10	Service brake		elektr. / mech.		elektr. / mech.		elektr. / mech.		
	E-Motor	6.1	Drive motor, rating S2 60 min	kW	4,5 / 4,5		4,5 / 4,5		4,5 / 4,5	
6.2		Lift motor, rating at S3 15%	kW	11,5		11,5		11,5		
6.3		Battery according to DIN 43531/35/36 A,B,C, no		DIN 43531 A		DIN 43531 A		DIN 43531 A		
6.4		Battery voltage/nominal capacity K5	V/Ah	48 / 500		48 / 625 48 / 750		48 / 625 48 / 750		
6.5		Battery weight	kg	715		855 1025		855 1025		
6.5		Battery dimensions L/W/H	mm	830/522/627		830/630/627 830/738/627		830/630/627 830/738/627		
6.6		Energy consumption according to VDI cycle 3)	kWh/h	4,2 4,3		4,3 4,4		4,7		
6.7		Throughput	t/h	104 120		128 128		138 138		
6.8	Energy consumption at max. throughput	kWh/h	4,7		4,9		5 5			
Others	8.1	Type of drive control		Impuls/AC						
	8.2	Working pressure for attachments	bar	200						
	8.3	Oil flow for attachments	l/min	25						
	8.4	Sound pressure level at operator's ear according to EN 12053	dB(A)	66						
	8.5	Trailer coupling, model/type DIN		DIN 15170/H						

3) 60 VDI work cycles/h

Make use of the advantages



Pure Energy

Our Pure Energy technology concept enables you to achieve the best possible energy efficiency coupled with maximum throughput:

- Most advanced 3-phase AC technology.
- Compact controller.
- Compact hydraulic unit.
- Demands-oriented control of the hydraulics/motors.

Superior operator comfort

The ergonomically designed operator's cab allows for relaxed operation with low fatigue, even during long shifts:

- Light and effortless electric hydraulic steering, reduces the number of steering wheel turns and provides a smaller steering wheel.
- The elimination of hydraulic components in the leg area reduces noise and provides more legroom.
- The height and pitch of the steering column is adjustable.
- All essential controls are located on the adjustable armrests (adjustable height and length), making operation especially comfortable.
- Minimal vibration due to the mounting of the cabin from the chassis ("Floating Cab").
- Clearly arranged operator display.

Professional battery management

3-phase AC technology offers both improved efficiency as well as optimum energy recovery, thereby ensuring longer operating times between battery changes.

- Lateral battery access.
- Individual replacement systems with pedestrian pallet trucks, fork lifts or cranes.
- Simple, space-saving charging via side door.
- Easy access for maintenance.
- Safe horizontal transport.

Maintenance-free braking system

Three maintenance-free braking systems make braking safe and comfortable:

- Motor brake for regenerative braking during deceleration.
- Automatically engaging parking brake for secure stopping, even on ramps.
- Brake pedal operated, maintenance-free disc brakes during dangerous situations.

Maintenance-free motors

The new generation of three-phase AC motors will impress you with their quiet and precise operation at all speeds.

- High torque for faster operation cycles.
- Lifetime lubrication of main components.
- Individually mounted drive motors for simpler servicing.
- Dust and water jet protection to IP 54.

Safety systems

Excellent drive dynamics and performance provide a high degree of safety. That's why the EFG Series 3 includes a comprehensive range of safety equipment:

- Deactivation of the hydraulic functions if seat is unoccupied.
- No roll-back on ramps or inclines due to the automatic parking brake, even when the truck is switched off.
- Automatic reduction of the driving speed when cornering with Jungheinrich Curve Control.
- High mounted fully floating axle.
- Speedometer.

A range of operator assistance systems (optional) provide even more safety for the operator, the fork lift truck and the load:

- Access Control: The access control system unlocks the vehicle only after a sequence of safety checks:
 1. Valid access rights.
 2. Closed seat switch.
 3. Seatbelt is secured.
- Drive Control: The speed control which automatically reduces the speed of travel when cornering and from a defined lift height.
- Lift Control: The lift speed control which, in addition to the travel speed reduction, also automatically reduces the tilt speed of the mast from a defined lift height. The tilt angle is shown on a separate display.

Intelligent electronics

Jerk-free travel, smooth reversing and precise positioning.

Optimally adapted to any situation using 5 individual work programmes.