

High performance and high energy efficiency with 4th generation AC technology

Electric power steering for improved operator comfort and reliability

SOLO- or MULTI-PILOT integrated into the adjustable armrest

Sealed components to help protect against dust and moisture



EFG 213 – 220 / 316k – 320

Three- And Four-Wheel Counterbalanced Truck (2,500 – 4,000 lbs.)

The advantages of electrics

The newest generation of AC technology offers numerous advantages for electric counterbalanced forklifts:

- Minimal energy consumption due to high efficiency and energy recovery.
- Minimal service costs due to the reduction of mechanical and hydraulic components.
- Efficient electric power steering using AC technology.

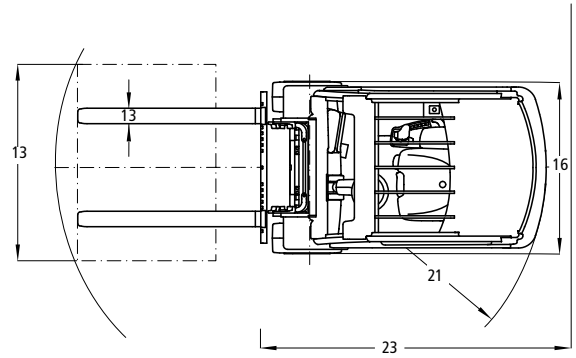
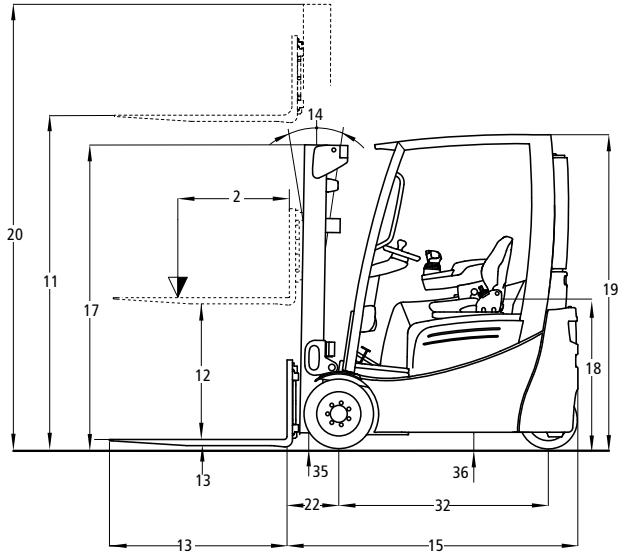
The advantage: industry-leading drive and lift performance levels and the ability to run up to two shifts on a single battery charge in most applications. Combine this with reduced maintenance requirements, and you can significantly reduce your total cost of ownership.

Outdoor applications

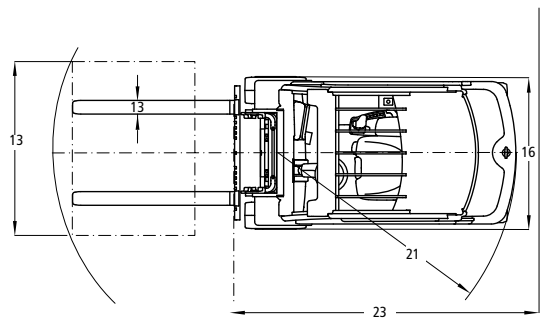
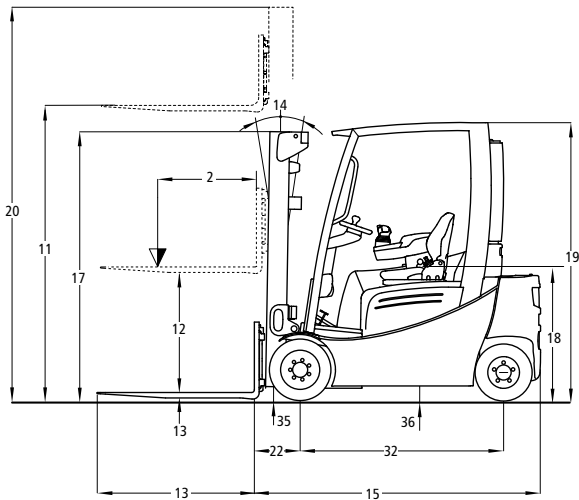
Harsh environments are no problem for the EFG 213-220 / 316k-320 series of forklifts because major electrical components are highly sealed, including connectors, controllers, motors and more. The enclosed cabin option provides a comfortable and productive environment for operators – even in wet, cold or extreme conditions.

EFG 213 – 220 / 316k – 320

EFG 213-220



EFG 316k-320



Technical data

					EFG 213 (3-wheel)		EFG 216k (3-wheel)		EFG 216 (3-wheel)				
Characteristics	1	Capacity	at rated load center		lb	kg	2,510	1,300	3,100	1,600	3,100	1,600	
	2		at load center - distance		in	mm	24	500	24	500	24	500	
	3	Power	diesel, gasoline, LP gas, electric			electric		electric		electric			
	4	Tire type	cushion, solid pneumatic			solid pneumatic		solid pneumatic		solid pneumatic			
	5	Wheels (x = driven)	number front / rear			2x/2		2x/2		2x/2			
Dimensions	11	Lift with standard two-stage mast (ZT)	maximum fork height		in	mm	118	3,000	118	3,000	118	3,000	
	12		free fork height		in	mm	5.9	150	5.9	150	5.9	150	
	13	Forks	thickness		in	mm	1.4	35	1.6	40	1.6	40	
			width		in	mm	3.9	100	3.9	100	3.9	100	
			length		in	mm	43.0	1,100	43.0	1,100	43.0	1,100	
	14	Fork spacing	out-to-out minimum / maximum		in	mm	12.3/36	312/914	12.3/36	312/914	12.3/36	312/914	
			Tilt		forward / backward		deg		7/7		7/7		
	15	Overall dimensions	length to fork face		in	mm	69.8	1,774	74.3	1,887	78.5	1,995	
	16		width	standard		in	mm	41.7	1,060	41.7	1,060	41.7	1,060
				w/ wide stance drive wheels		in	mm	n/a		n/a		n/a	
	17		with lowered mast		in	mm	79	2,000	79	2,000	79	2,000	
	18		seat height to SIP		in	mm	36.2	920	36.2	920	36.2	920	
	19	to top of overhead guard		in	mm	80.4	2,040	80.4	2,040	80.4	2,040		
20	with extended mast		in	mm	166	4,216	166	4,216	166	4,216			
21	Minimum outside turning radius		in	mm	56.7	1,440	60.9	1,548	65.2	1,655			
22	Load moment constant		in	mm	13.2 ¹⁾	335	13.4 ¹⁾	340	13.4 ¹⁾	340			
23	Minimum aisle - 90° stack – must add load length and clearance		in	mm	69.9 ¹⁾	1,780	74.3 ¹⁾	1,890	78.6 ¹⁾	2,000			
Performance	24	travel speed	loaded	mph	km/h	10	16	10	16	10	16		
			empty	mph	km/h	10	16	10	16	10	16		
	25	lift speed	loaded	fpm	m/s	94.5	0.48	96.5	0.49	96.5	0.49		
			empty	fpm	m/s	118.1	0.60	118.1	0.60	118.1	0.60		
	26	lowering speed	loaded	fpm	m/s	108.3	0.55	108.3	0.55	108.3	0.55		
			empty	fpm	m/s	108.3	0.55	108.3	0.55	108.3	0.55		
28	Gradeability	maximum gradeability	loaded	%		28		27		27			
		empty	%		35		35		35				
Weight	29	Empty	with minimum weight battery		lb	kg	5,947	2,698	6,520	2,957	6,627	3,006	
	30	Axle load	with rated load		lb	kg	7,434	3,514	8,474	4,014	8,480	4,015	
			front	lb	kg	1,023	484	1,146	543	1,247	590		
			rear	lb	kg	2,885	1,309	3,067	1,391	3,243	1,471		
31	Tire size	front, standard solid pneumatic tires		in		18x7-8		18x7-8		18x7-8			
		rear solid pneumatic tires		in		140/55-9		140/55-9		140/55-9			
32	Wheelbase	in	mm	49.2	1,249	53.4	1,357	57.7	1,465				
33	Tread width	front, standard solid pneumatic tires		in	mm	35.6	904	35.6	904	35.6	904		
34		rear solid pneumatic tires		in	mm	6.9	176	6.9	176	6.9	176		
35	Ground clearance	at lowest point at mast		in	mm	3.1	80	3.1	80	3.1	80		
36		at center of wheelbase		in	mm	3.9	100	3.9	100	3.9	100		
37	Brakes	service		type		electric / mechanical		electric / mechanical		electric / mechanical			
		parking		type		electromagnetic		electromagnetic		electromagnetic			
Powertrain	39	Battery	type		lead-acid		lead-acid		lead-acid				
			dimensions (length x width x height)		in		20.55 x 32.68 x 24.69		24.80 x 32.68 x 24.69		29.06 x 32.68 x 24.69		
	41	maximum capacity at 6 hour discharge rate	Ah	kWh	400	18.7	500	23.3	600	27.8			
			weight, minimum		lb	kg	1,497	679	1,791	812	2,147	974	
	43	Motors	traction output (60 min. rating) x 2		HP	kW	6.0	4.5	6.0	4.5	6.0	4.5	
			lift output (15% rating)		HP	kW	15.4	11.5	15.4	11.5	15.4	11.5	
	45	Controls	drive		type		Impulse / AC		Impulse / AC		Impulse / AC		
			hydraulic		type		AC		AC		AC		
47	Relief pressure	for attachments at auxiliary		psi	bar	2,900	200	2,900	200	2,900	200		
48	Noise level	mean value at operator's ear		dB(A)		66		66		66			

1) Add 1.0" (25 mm) if truck is equipped with a triplex mast. Add an additional 0.9" (23 mm) if equipped with an integrated sideshifter, or an additional 2.4" (60 mm) if equipped with a hang-on sideshifter.

This specification sheet only provides technical values for the standard truck. Non-standard tires, different masts, different axle widths, additional equipment, etc. could produce other values. Rights reserved for technical changes and improvements.

EFG 218k (3-wheel)		EFG 218 (3-wheel)		EFG 220 (3-wheel)		EFG 316k (4-wheel)		EFG 316 (4-wheel)		EFG 318k (4-wheel)		EFG 318 (4-wheel)		EFG 320 (4-wheel)	
3,490	1,800	3,490	1,800	3,880	2,000	3,100	1,600	3,100	1,600	3,490	1,800	3,490	1,800	3,880	2,000
24	500	24	500	24	500	24	500	24	500	24	500	24	500	24	500
electric		electric		electric		electric		electric		electric		electric		electric	
solid pneumatic		solid pneumatic		solid pneumatic		solid pneumatic		solid pneumatic		solid pneumatic		solid pneumatic		solid pneumatic	
2x/2		2x/2		2x/2		2x/2		2x/2		2x/2		2x/2		2x/2	
118	3,000	118	3,000	118	3,000	118	3,000	118	3,000	118	3,000	118	3,000	118	3,000
5.9	150	5.9	150	5.9	150	5.9	150	5.9	150	5.9	150	5.9	150	5.9	150
1.6	40	1.6	40	1.6	40	1.6	40	1.6	40	1.6	40	1.6	40	1.6	40
3.9	100	3.9	100	3.9	100	3.9	100	3.9	100	3.9	100	3.9	100	3.9	100
43.0	1,100	43.0	1,100	43.0	1,100	43.0	1,100	43.0	1,100	43.0	1,100	43.0	1,100	43.0	1,100
12.3/36	312/914	12.3/36	312/914	12.3/36	312/914	12.3/36	312/914	12.3/36	312/914	12.3/36	312/914	12.3/36	312/914	12.3/36	312/914
7/7		7/7		7/7		7/7		7/7		7/7		7/7		7/7	
74.3	1,887	78.5	1,995	78.5	1,995	78.3	1,990	82.6	2,098	78.3	1,990	82.6	2,098	82.6	2,098
44.1	1,120	44.1	1,120	44.1	1,120	41.7	1,060	41.7	1,060	44.1	1,120	44.1	1,120	44.1	1,120
n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a	
79	2,000	79	2,000	79	2,000	79	2,000	79	2,000	79	2,000	79	2,000	79	2,000
36.2	920	36.2	920	36.2	920	36.2	920	36.2	920	36.2	920	36.2	920	36.2	920
80.4	2,040	80.4	2,040	80.4	2,040	80.4	2,040	80.4	2,040	80.4	2,040	80.4	2,040	80.4	2,040
166	4,216	166	4,216	166	4,216	166	4,216	166	4,216	166	4,216	166	4,216	166	4,216
60.9	1,548	65.2	1,655	65.2	1,655	73.2	1,859	78.1	1,985	73.2	1,859	78.1	1,985	78.1	1,985
13.4 ¹⁾	340	13.4 ¹⁾	340	13.4 ¹⁾	340	13.4 ¹⁾	340	13.4 ¹⁾	340	13.4 ¹⁾	340	13.4 ¹⁾	340	13.4 ¹⁾	340
74.3 ¹⁾	1,890	78.6 ¹⁾	2,000	78.6 ¹⁾	2,000	86.6 ¹⁾	2,200	91.5 ¹⁾	2,325	86.6 ¹⁾	2,200	91.5 ¹⁾	2,325	91.5 ¹⁾	2,325
10	16	10	16	10	16	10.6	170	10.6	170	10.6	170	10.6	170	10.6	170
10	16	10	16	10	16	10.6	170	10.6	170	10.6	170	10.6	170	10.6	170
86.6	0.44	86.6	0.44	78.7	0.40	96.5	0.49	96.5	0.49	86.6	0.44	86.6	0.44	78.7	0.40
108.3	0.55	108.3	0.55	108.3	0.55	118.1	0.60	118.1	0.60	108.3	0.55	108.3	0.55	108.3	0.55
108.3	0.55	108.3	0.55	108.3	0.55	108.3	0.55	108.3	0.55	108.3	0.55	108.3	0.55	108.3	0.55
108.3	0.55	108.3	0.55	108.3	0.55	108.3	0.55	108.3	0.55	108.3	0.55	108.3	0.55	108.3	0.55
26		25		24		27		27		26		25		24	
35		35		35		35		35		35		35		35	
7,084	3,213	6,957	3,156	7,343	3,331	6,597	2,992	6,503	2,950	6,906	3,133	6,812	3,090	7,175	3,255
9,306	4,412	9,191	4,360	9,814	4,661	8,542	3,967	8,372	3,998	9,149	4,300	9,063	4,322	9,667	4,631
1,268	601	1,256	596	1,409	669	1,155	625	1,231	552	1,247	632	1,239	568	1,388	624
3,066	1,391	3,298	1,496	3,259	1,478	2,999	1,360	3,235	1,467	3,012	1,366	3,251	1,475	3,232	1,466
4,018	1,822	3,659	1,660	4,084	1,853	3,598	1,632	3,268	1,482	3,894	1,766	3,561	1,615	3,943	1,789
200/50-10		200/50-10		200/50-10		18x7-8		18x7-8		200/50-10		200/50-10		200/50-10	
140/55-9		140/55-9		140/55-9		16x6-8		16x6-8		16x6-8		16x6-8		16x6-8	
53.4	1,357	57.7	1,465	57.7	1,465	55.1	1,400	59.4	1,508	55.1	1,400	59.4	1,508	59.4	1,508
36	914	36	914	36	914	35.6	904	35.6	904	36.0	914	36.0	914	36.0	914
6.9	176	6.9	176	6.9	176	32.7	830	32.7	830	32.7	830	32.7	830	32.7	830
3.1	80	3.1	80	3.1	80	3.1	80	3.1	80	3.1	80	3.1	80	3.1	80
3.9	100	3.9	100	3.9	100	3.9	100	3.9	100	3.9	100	3.9	100	3.9	100
electric / mechanical		electric / mechanical		electric / mechanical		electric / mechanical		electric / mechanical		electric / mechanical		electric / mechanical		electric / mechanical	
electromagnetic		electromagnetic		electromagnetic		electromagnetic		electromagnetic		electromagnetic		electromagnetic		electromagnetic	
lead-acid		lead-acid		lead-acid		lead - acid		lead - acid		lead - acid		lead - acid		lead - acid	
24.80 x 32.68 x 24.69		29.06 x 32.68 x 24.69		29.06 x 32.68 x 24.69		24.80 x 32.68 x 24.69		29.06 x 32.68 x 24.69		24.80 x 32.68 x 24.69		29.06 x 32.68 x 24.69		29.06 x 32.68 x 24.69	
500	23.3	600	27.8	600	27.8	500	23.3	600	27.8	500	23.3	600	27.8	600	27.8
1,791	812	2,147	974	2,147	974	1,791	812	2,147	974	1,791	812	2,147	974	2,147	974
6.0	4.5	6.0	4.5	6.0	4.5	6.0	4.5	6.0	4.5	6.0	4.5	6.0	4.5	6.0	4.5
15.4	11.5	15.4	11.5	15.4	11.5	15.4	11.5	15.4	11.5	15.4	11.5	15.4	11.5	15.4	11.5
Impulse / AC		Impulse / AC		Impulse / AC		Impulse / AC		Impulse / AC		Impulse / AC		Impulse / AC		Impulse / AC	
AC		AC		AC		AC		AC		AC		AC		AC	
2,900	200	2,900	200	2,900	200	2,900	200	2,900	200	2,900	200	2,900	200	2,900	200
66		66		66		67		67		67		67		67	

The Jungheinrich Advantage

Superior operator comfort

The ergonomic operator compartment allows for relaxed and productive operation, particularly beneficial at the end of long shifts:

- Low-effort electric power steering allows for a smaller steering wheel and minimizes the number of revolutions necessary to make a turn.
- The elimination of hydraulic components in the leg area reduces steering-related noise and provides more leg room.
- Ability to tilt and telescope the steering column to suit the operator's needs.
- All essential controls are located on the highly-adjustable armrest, allowing for easy, intuitive operator control.
- Operators will experience an extremely comfortable ride on rough or uneven floors with the combination of solid pneumatic tires, a full-suspension seat and floating cabin.

Maintenance-free braking system

- Regenerative braking with the traction motor allows for smooth, energy efficient deceleration.
- Automatically engaging parking brake for secure stopping, even on ramps.
- Brake pedal operated, maintenance-free disc brakes allow for more aggressive stopping.

Maintenance-free motors

The new generation of 3-phase AC motors will impress – providing quiet and precise operation at all speeds.

- High torque for faster operation cycles.
- Lifetime lubrication of main components.
- Individually mounted drive motors for easier service and maintenance.
- Dust and water protection to IP54.



Convenient controls

Control systems

High performance also requires a high degree of control. That's why the EFG series includes a comprehensive range of equipment for more secure operation:

- Deactivation of all hydraulic functions when the operator seat is not occupied.
- No roll-back on ramps or inclines with the automatic parking brake, even when the vehicle is switched off.
- Automatic progressive reduction of the driving speed during cornering with Jungheinrich Curve Control.

Intelligent electronics

- Smooth travel / reversing and precise positioning.
- Optimally adapts to any situation using five individual work programs.
- Efficient communication between the truck and operator / technician with the highly informative, interactive display.



Interactive display

Parts when you need them

Jungheinrich's Parts Fast or Parts Free Guarantee ensures next-business-day delivery by 5:00 p.m. of all Jungheinrich parts in the United States, or they're free, including freight. For customers in Canada and Mexico, the guarantee ensures shipping of parts within 24 hours from the time the order was placed by the dealer. See your local Jungheinrich dealer for program details.

* Programs may be subject to change without notice and may vary by region. Please ask your local Jungheinrich dealer for complete terms and conditions.