

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

Electric power steering for improved operator comfort and reliability

solo- or multiPILOT integrated into the adjustable armrest

Sealed components to help protect against dust and moisture

The ability to run up to two shifts on a single battery charge



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.

**JUNGHEINRICH®**

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	Capacity at load center – distance	in	mm	24	500	24	500	24	500			
	3	Power			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	Maximum fork height*	h ₃	in	mm	118	3,000	118	3,000	118	3,000		
	12	Free fork height*	h ₂	in	mm	5.9	150	5.9	150	5.9	150		
	13	Forks – thickness	s	in	mm	1.4	35	1.6	40	1.6	40		
		Forks – width	e	in	mm	3.9	100	3.9	100	3.9	100		
		Forks – length	l	in	mm	43.0	1,100	43.0	1,100	43.0	1,100		
		Fork spacing – out-to-out minimum / maximum	b ₁₂	in	mm	12.3/36	312/914	12.3/36	312/914	12.3/36	312/914		
	14	Tilt – forward / backward	d	deg		7/7		7/7		7/7			
	15	Length to fork face	l ₂	in	mm	69.8	1,774	74.3	1,887	78.5	1,995		
	16	Standard width	b	in	mm	41.7	1,060	41.7	1,060	41.7	1,060		
		Width w/ wide stance drive wheels			in	mm	n/a		n/a		n/a		
	17	Height with lowered mast	h ₁	in	mm	79	2,000	79	2,000	79	2,000		
	18	Seat height to SIP	h ₇	in	mm	36.2	920	36.2	920	36.2	920		
	19	Height to top of overhead guard	h ₆	in	mm	80.4	2,040	80.4	2,040	80.4	2,040		
	20	Height with extended mast	h ₄	in	mm	166	4,216	166	4,216	166	4,216		
	21	Minimum outside turning radius	Wa	in	mm	56.7	1,440	60.9	1,548	65.2	1,655		
	22	Load moment constant	x	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	Ast	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
			travel speed – unloaded			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	
		lift speed – unloaded			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	
		lowering speed – unloaded			fpm	m/s	108.3	0.55	108.3	0.55	108.3	0.55	
28		maximum gradeability – loaded					%		28		27		
		maximum gradeability – unloaded					%		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 – front	lb	kg	7,434	3,514	8,474	4,014	8,480	4,015			
		Axle load with rated load – rear	lb	kg	1,023	484	1,146	543	1,247	590			
		Axle load without load – front	lb	kg	2,885	1,309	3,067	1,391	3,243	1,471			
		Axle load without load – rear	lb	kg	3,062	1,389	3,453	1,566	3,384	1,535			
31		Tire size – front, standard solid pneumatic tires			in		18x7-8		18x7-8		18x7-8		
	Tire size – rear solid pneumatic tires			in		140/55-9		140/ 55-9		140/55 - 9			
Chassis	32	Wheelbase	y	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	Ground clearance – rear solid pneumatic tires			in	mm	6.9	176	6.9	176	6.9	176	
	35	Ground clearance – at lowest point at mast	m ₁	in	mm	3.1	80	3.1	80	3.1	80		
	36	Ground clearance – at center of wheelbase	m ₂	in	mm	3.9	100	3.9	100	3.9	100		
	37	Service brakes			type		electric / mechanical		electric / mechanical		electric / mechanical		
	38	Parking brakes			type		electromagnetic		electromagnetic		electromagnetic		
	39	Battery type					lead-acid		lead-acid		lead-acid		
Powertrain	40	Battery 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	Battery – maximum capacity at 6 hour discharge rate	Ah	kWh	400	18.7	500	23.3	600	27.8			
	42	Battery 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			
	44	Controls – lift output (15% rating)	HP	kW	15.4	11.5	15.4	11.5	15.4	11.5			
	45	Drive controls			type		Impulse / AC		Impulse / AC		Impulse / AC		
	46	hydraulic controls			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.

* Lift with standard two-stage mast (ZT)

as of: 03/2020

			EFG 218k (3-wheel)		EFG 218 (3-wheel)		EFG 220 (3-wheel)	
1	lb	kg	3,490	1,800	3,490	1,800	3,880	2,000
2	in	mm	24	500	24	500	24	500
3			electric		electric		electric	
4			solid pneumatic		solid pneumatic		solid pneumatic	
5			2x/2		2x/2		2x/2	
11	in	mm	118	3,000	118	3,000	118	3,000
12	in	mm	5.9	150	5.9	150	5.9	150
	in	mm	1.6	40	1.6	40	1.6	40
	in	mm	3.9	100	3.9	100	3.9	100
13	in	mm	43.0	1,100	43.0	1,100	43.0	1,100
	in	mm	12.3/36	312/914	12.3/36	312/914	12.3/36	312/914
14			7/7		7/7		7/7	
15	in	mm	74.3	1,887	78.5	1,995	78.5	1,995
16	in	mm	44.1	1,120	44.1	1,120	44.1	1,120
	in	mm	n/a		n/a		n/a	
17	in	mm	79	2,000	79	2,000	79	2,000
18	in	mm	36.2	920	36.2	920	36.2	920
19	in	mm	80.4	2,040	80.4	2,040	80.4	2,040
20	in	mm	166	4,216	166	4,216	166	4,216
21	in	mm	60.9	1,548	65.2	1,655	65.2	1,655
22	in	mm	13.4 ¹⁾	340	13.4 ¹⁾	340	13.4 ¹⁾	340
23	in	mm	74.3 ¹⁾	1,890	78.6 ¹⁾	2,000	78.6 ¹⁾	2,000
24	mph	km/h	10	16	10	16	10	16
	mph	km/h	10	16	10	16	10	16
25	fpm	m/s	86.6	0.44	86.6	0.44	78.7	0.40
	fpm	m/s	108.3	0.55	108.3	0.55	108.3	0.55
26	fpm	m/s	108.3	0.55	108.3	0.55	108.3	0.55
	fpm	m/s	108.3	0.55	108.3	0.55	108.3	0.55
28			26		25		24	
			35		35		35	
29	lb	kg	7,084	3,213	6,957	3,156	7,343	3,331
	lb	kg	9,306	4,412	9,191	4,360	9,814	4,661
30	lb	kg	1,268	601	1,256	596	1,409	669
	lb	kg	3,066	1,391	3,298	1,496	3,259	1,478
	lb	kg	4,018	1,822	3,659	1,660	4,084	1,853
31			200/50-10		200/50-10		200/50-10	
			140/55-9		140/55-9		140/55-9	
32	in	mm	53.4	1,357	57.7	1,465	57.7	1,465
33	in	mm	36	914	36	914	36	914
34	in	mm	6.9	176	6.9	176	6.9	176
35	in	mm	3.1	80	3.1	80	3.1	80
36	in	mm	3.9	100	3.9	100	3.9	100
37			electric / mechanical		electric / mechanical		electric / mechanical	
38			electromagnetic		electromagnetic		electromagnetic	
39			lead-acid		lead-acid		lead-acid	
40			24.80 x 32.68 x 24.69		29.06 x 32.68 x 24.69		29.06 x 32.68 x 24.69	
41	Ah	kWh	500	23.3	600	27.8	600	27.8
42	lb	kg	1,791	812	2,147	974	2,147	974
43	HP	kW	6.0	4.5	6.0	4.5	6.0	4.5
44	HP	kW	15.4	11.5	15.4	11.5	15.4	11.5
45			Impulse / AC		Impulse / AC		Impulse / AC	
46			AC		AC		AC	
47	psi	bar	2,900	200	2,900	200	2,900	200
48			66		66		66	



Technical data

					EFG 316k (4-wheel)		EFG 316 (4-wheel)		EFG 318k (4-wheel)			
Characteristics	1	Capacity at rated load center	lb	kg	3,100	1,600	3,100	1,600	3,490	1,800		
	2	Capacity at load center – distance	in	mm	24	500	24	500	24	500		
	3	Power			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	Maximum fork height*	h ₃	in	mm	118	3,000	118	3,000	118	3,000	
	12	Free fork height*	h ₂	in	mm	5.9	150	5.9	150	5.9	150	
	13	Forks – thickness	s	in	mm	1.6	40	1.6	40	1.6	40	
		Forks – width	e	in	mm	3.9	100	3.9	100	3.9	100	
		Forks – length	l	in	mm	43.0	1,100	43.0	1,100	43.0	1,100	
		Fork spacing – out-to-out minimum / maximum	b ₁₂	in	mm	12.3/36	312/914	12.3/36	312/914	12.3/36	312/914	
	14	Tilt – forward / backward	d	deg		7/7		7/7		7/7		
	15	Length to fork face	l ₂	in	mm	78.3	1,990	82.6	2,098	78.3	1,990	
	16	Standard width	b	in	mm	41.7	1,060	41.7	1,060	44.1	1,120	
		Width w/ wide stance drive wheels			in	mm	n/a		n/a		n/a	
	17	Height with lowered mast	h ₁	in	mm	79	2,000	79	2,000	79	2,000	
	18	Seat height to SIP	h ₇	in	mm	36.2	920	36.2	920	36.2	920	
	19	Height to top of overhead guard	h ₆	in	mm	80.4	2,040	80.4	2,040	80.4	2,040	
	20	Height with extended mast	h ₄	in	mm	166	4,216	166	4,216	166	4,216	
	21	Minimum outside turning radius	Wa	in	mm	73.2	1,859	78.1	1,985	73.2	1,859	
	22	Load moment constant	x	in	mm	13.4 ¹⁾	340	13.4 ¹⁾	340	13.4 ¹⁾	340	
	23	Minimum aisle - 90° stack – must add load length and clearance	Ast	in	mm	86.6 ¹⁾	2,200	91.5 ¹⁾	2,325	86.6 ¹⁾	2,200	
	Performance	24	travel speed – loaded			mph	km/h	10.6	17.0	10.6	17.0	10.6
travel speed – unloaded					mph	km/h	10.6	17.0	10.6	17.0	10.6	17.0
25		lift speed – loaded			fpm	m/s	96.5	0.49	96.5	0.49	86.6	0.44
		lift speed – unloaded			fpm	m/s	118.1	0.60	118.1	0.60	108.3	0.55
26		lowering speed – loaded			fpm	m/s	108.3	0.55	108.3	0.55	108.3	0.55
		lowering speed – unloaded			fpm	m/s	108.3	0.55	108.3	0.55	108.3	0.55
28		maximum gradeability – loaded					%		27		26	
		maximum gradeability – unloaded					%		35		35	
Weight	29	Empty with minimum weight battery	lb	kg	6,597	2,992	6,503	2,950	6,906	3,133		
	30	Axle load with rated load – front	lb	kg	8,542	3,967	8,372	3,998	9,149	4,300		
		Axle load with rated load – rear	lb	kg	1,155	625	1,231	552	1,247	632		
		Axle load without load – front	lb	kg	2,999	1,360	3,235	1,467	3,012	1,366		
		Axle load without load – rear	lb	kg	3,598	1,632	3,268	1,482	3,894	1,766		
Chassis	31	Tire size – front, standard solid pneumatic tires			in		18x7-8		18x7-8		200/50-10	
		Tire size – rear solid pneumatic tires			in		16x6-8		16x6-8		16x6-8	
	32	Wheelbase	y	in	mm	55.1	1,400	59.4	1,508	55.1	1,400	
	33	Tread width – front, standard solid pneumatic tires			in	mm	35.6	904	35.6	904	36.0	914
	34	Ground clearance – rear solid pneumatic tires			in	mm	32.7	830	32.7	830	32.7	830
	35	Ground clearance – at lowest point at mast	m ₁	in	mm	3.1	80	3.1	80	3.1	80	
	36	Ground clearance – at center of wheelbase	m ₂	in	mm	3.9	100	3.9	100	3.9	100	
	37	Service brakes			type		electric / mechanical		electric / mechanical		electric / mechanical	
	38	Parking brakes			type		electromagnetic		electromagnetic		electromagnetic	
	39	Battery type					lead - acid		lead - acid		lead - acid	
Powertrain	40	Battery dimensions (length x width x height)			in		24.80 x 32.68 x 24.69		29.06 x 32.68 x 24.69		24.80 x 32.68 x 24.69	
	41	Battery – maximum capacity at 6 hour discharge rate	Ah	kWh	500	23.3	600	27.8	500	23.3		
	42	Battery weight, minimum	lb	kg	1,791	812	2,147	974	1,791	812		
	43	Motors traction output (60 min. rating) x 2	HP	kW	6.0	4.5	6.0	4.5	6.0	4.5		
	44	Controls – lift output (15% rating)	HP	kW	15.4	11.5	15.4	11.5	15.4	11.5		
	45	Drive controls			type		Impulse / AC		Impulse / AC		Impulse / AC	
	46	hydraulic controls			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)		67		67		67	

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.

* Lift with standard two-stage mast (ZT)

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.

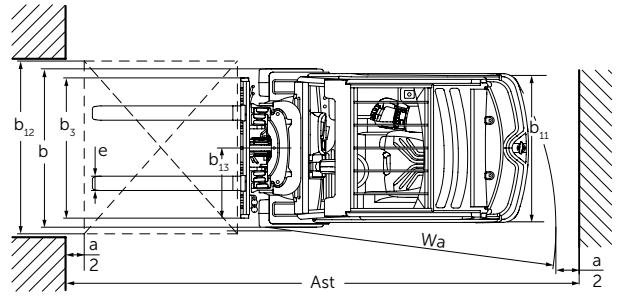
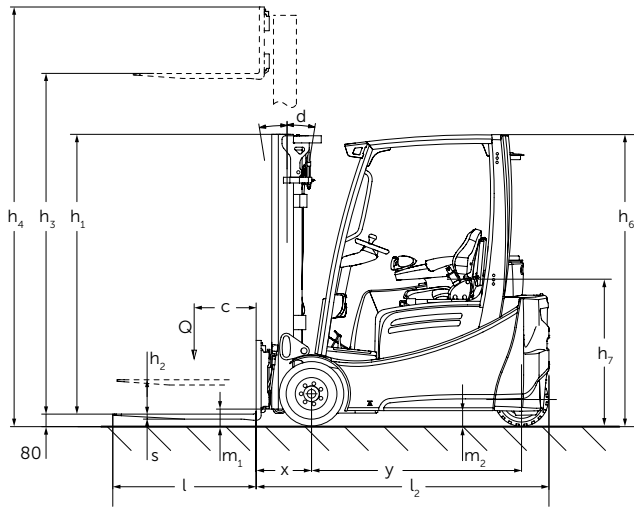
as of: 03/2020

			EFG 318 (4-wheel)		EFG 320 (4-wheel)	
1	lb	kg	3,490	1,800	3,880	2,000
2	in	mm	24	500	24	500
3			electric		electric	
4			solid pneumatic		solid pneumatic	
5			2x/2		2x/2	
11	in	mm	118	3,000	118	3,000
12	in	mm	5.9	150	5.9	150
	in	mm	1.6	40	1.6	40
	in	mm	3.9	100	3.9	100
13	in	mm	43.0	1,100	43.0	1,100
	in	mm	12.3/36	312/914	12.3/36	312/914
14			7/7		7/7	
15	in	mm	82.6	2,098	82.6	2,098
	in	mm	44.1	1,120	44.1	1,120
16	in	mm	n/a		n/a	
17	in	mm	79	2,000	79	2,000
18	in	mm	36.2	920	36.2	920
19	in	mm	80.4	2,040	80.4	2,040
20	in	mm	166	4,216	166	4,216
21	in	mm	78.1	1,985	78.1	1,985
22	in	mm	13.4 ¹⁾	340	13.4 ¹⁾	340
23	in	mm	91.5 ¹⁾	2,325	91.5 ¹⁾	2,325
24	mph	km/h	10.6	170	10.6	170
	mph	km/h	10.6	170	10.6	170
25	fpm	m/s	86.6	0.44	78.7	0.40
	fpm	m/s	108.3	0.55	108.3	0.55
26	fpm	m/s	108.3	0.55	108.3	0.55
	fpm	m/s	108.3	0.55	108.3	0.55
28			25		24	
			35		35	
29	lb	kg	6,812	3,090	7,175	3,255
	lb	kg	9,063	4,322	9,667	4,631
30	lb	kg	1,239	568	1,388	624
	lb	kg	3,251	1,475	3,232	1,466
	lb	kg	3,561	1,615	3,943	1,789
31			200/50-10		200/50-10	
			16x6-8		16x6-8	
32	in	mm	59.4	1,508	59.4	1,508
33	in	mm	36.0	914	36.0	914
34	in	mm	32.7	830	32.7	830
35	in	mm	3.1	80	3.1	80
36	in	mm	3.9	100	3.9	100
37			electric / mechanical		electric / mechanical	
38			electromagnetic		electromagnetic	
39			lead - acid		lead - acid	
40			29.06 x 32.68 x 24.69		29.06 x 32.68 x 24.69	
41	Ah	kWh	600	278	600	278
42	lb	kg	2,147	974	2,147	974
43	HP	kW	6.0	4.5	6.0	4.5
44	HP	kW	15.4	11.5	15.4	11.5
45			Impulse / AC		Impulse / AC	
46			AC		AC	
47	psi	bar	2,900	200	2,900	200
48			67		67	

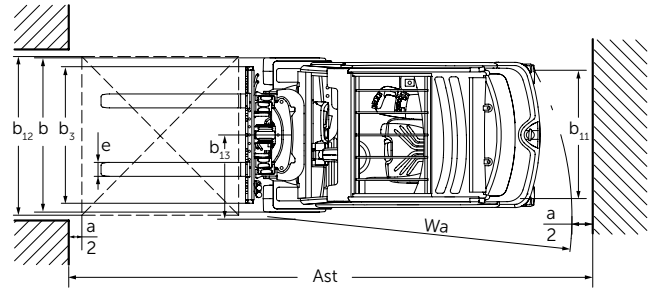
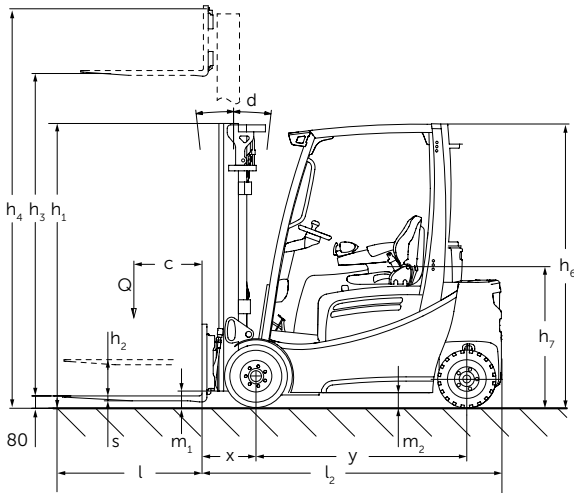


EFG 213 – 220 / 316k – 320

EFG 213-220



EFG 316k-320





The Jungheinrich Advantage



Interactive display



Convenient controls



snapFIT Battery Extraction



Ergonomic operator compartment

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.

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 curveCONTROL.

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.

Lithium-ion Package Advantages (available on EFG 213 / 216 / 218 and EFG 316 / 318 / 320)

- Fast charging with no need for battery exchanges
- Maintenance-free with no odors from gases or acidification
- Longer service life and lower maintenance compared with lead-acid batteries
- Charging can be interrupted at anytime
- 5-year battery warranty included

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.