



## Electric four wheel counterbalance forklift truck

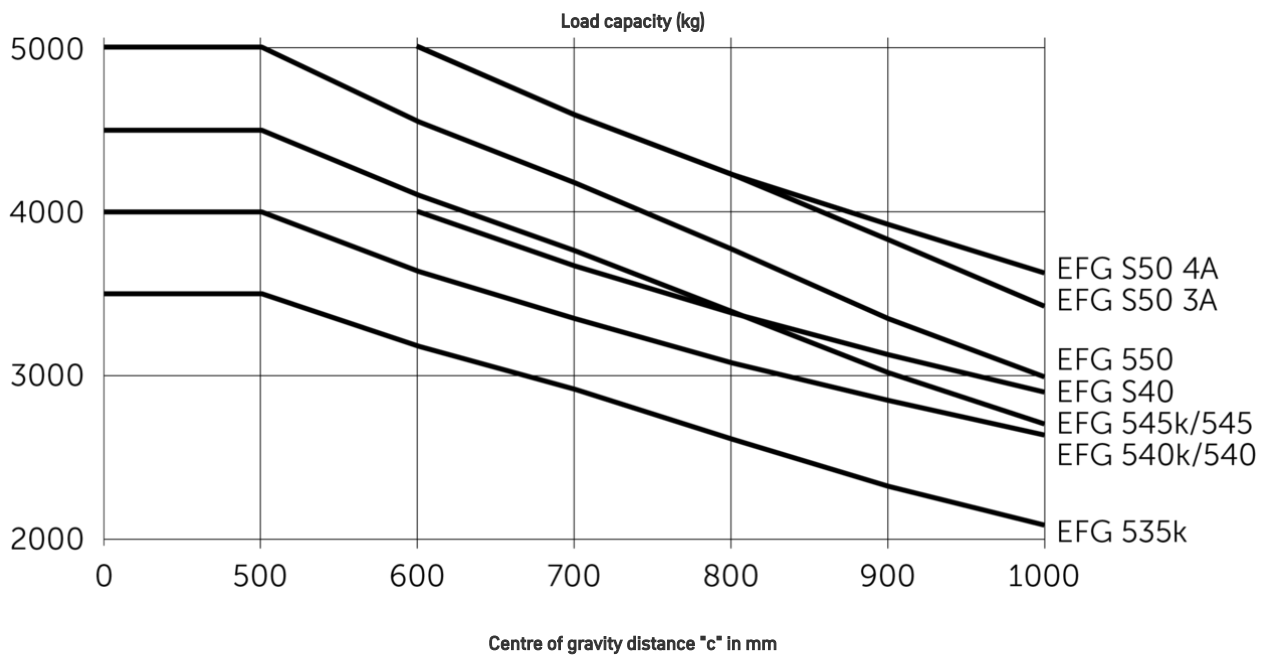
**EFG 535-S50**

Lift height: 2480-7500 mm / Load capacity: 3500-5000 kg

**LI-ION**  
technology

**JUNGHEINRICH**

# EFG 535-S50





Technical drawing EFG 5 (2015)

# EFG 535-S50

EFG 535k	Lift (h3)	Retracted mast height (h1)	Free lift (h2)	Extended mast height (h4)	Forward/backward tilt of mast
Duplex mast ZT	2900 mm	2200 mm	150 mm	3689 mm	6 / 8 °
	3100 mm	2300 mm	150 mm	3889 mm	6 / 8 °
	3300 mm	2400 mm	150 mm	4089 mm	6 / 8 °
	3500 mm	2500 mm	150 mm	4289 mm	6 / 8 °
	3700 mm	2600 mm	150 mm	4489 mm	6 / 8 °
	4000 mm	2750 mm	150 mm	4789 mm	6 / 8 °
	4300 mm	2950 mm	150 mm	5089 mm	6 / 8 °
	4500 mm	3050 mm	150 mm	5289 mm	6 / 8 °
Duplex mast ZZ	3100 mm	2265 mm	1496 mm	3669 mm	6 / 8 °
	3300 mm	2365 mm	1596 mm	3869 mm	6 / 8 °
	3500 mm	2465 mm	1696 mm	4069 mm	6 / 8 °
	3700 mm	2565 mm	1796 mm	4269 mm	6 / 8 °
	4000 mm	2715 mm	1946 mm	4469 mm	6 / 8 °
Triplex mast DZ	4400 mm	2165 mm	1396 mm	5169 mm	6 / 8 °
	4700 mm	2265 mm	1496 mm	5469 mm	6 / 8 °
	5000 mm	2365 mm	1596 mm	5769 mm	6 / 8 °
	5500 mm	2565 mm	1796 mm	6269 mm	6 / 5 °
	6000 mm	2765 mm	1996 mm	6769 mm	6 / 5 °
	6500 mm	2965 mm	2196 mm	7269 mm	6 / 5 °
	7000 mm	3165 mm	2396 mm	7769 mm	6 / 3 °
	7500 mm	3365 mm	2596 mm	8269 mm	6 / 3 °
EFG 540k, EFG 540, EFG 545k, EFG 545	Lift (h3)	Retracted mast height (h1)	Free lift (h2)	Extended mast height (h4)	Forward/backward tilt of mast
Duplex mast ZT / Including 3A fork carriage with 4 rollers (standard)	2750 mm	2165 mm	150 mm	3465 mm	6 / 8 °
	3000 mm	2290 mm	150 mm	3715 mm	6 / 8 °
	3100 mm	2348 mm	150 mm	3823 mm	6 / 8 °
	3300 mm	2440 mm	150 mm	4015 mm	6 / 8 °
	3500 mm	2548 mm	150 mm	4223 mm	6 / 8 °

	3700 mm	2640 mm	150 mm	4415 mm	6 / 8 °
	4000 mm	2795 mm	150 mm	4720 mm	6 / 8 °
	4300 mm	2940 mm	150 mm	5015 mm	6 / 8 °
	4500 mm	3040 mm	150 mm	5215 mm	6 / 8 °
	5000 mm	3290 mm	150 mm	5715 mm	6 / 8 °
	5500 mm	3540 mm	150 mm	6215 mm	6 / 5 °
Duplex mast ZT / suitable for integrated sideshift 3A with 6 rollers (option)	2750 mm	2165 mm	150 mm	3608 mm	6 / 8 °
	3000 mm	2290 mm	150 mm	3858 mm	6 / 8 °
	3100 mm	2348 mm	150 mm	3958 mm	6 / 8 °
	3300 mm	2440 mm	150 mm	4158 mm	6 / 8 °
	3500 mm	2548 mm	150 mm	4358 mm	6 / 8 °
	3700 mm	2640 mm	150 mm	4558 mm	6 / 8 °
	4000 mm	2795 mm	150 mm	4858 mm	6 / 8 °
	4300 mm	2940 mm	150 mm	5158 mm	6 / 8 °
	4500 mm	3040 mm	150 mm	5358 mm	6 / 8 °
	5000 mm	3290 mm	150 mm	5858 mm	6 / 8 °
	5500 mm	3540 mm	150 mm	6358 mm	6 / 5 °
Duplex mast ZZ / Including 3A fork carriage with 4 rollers (standard)	2775 mm	2140 mm	1382 mm	3533 mm	6 / 8 °
	3142 mm	2323 mm	1565 mm	3900 mm	6 / 8 °
	3342 mm	2423 mm	1665 mm	4100 mm	6 / 8 °
	3542 mm	2523 mm	1765 mm	4300 mm	6 / 8 °
	3675 mm	2590 mm	1832 mm	4433 mm	6 / 8 °
	4035 mm	2770 mm	2012 mm	4793 mm	6 / 8 °
	4395 mm	2950 mm	2192 mm	5153 mm	6 / 8 °
	5095 mm	3300 mm	2542 mm	5853 mm	6 / 8 °
	5524 mm	3515 mm	2757 mm	6282 mm	6 / 5 °
	Duplex mast ZZ / suitable for integrated sideshift 3A with 6 rollers (option)	2775 mm	2140 mm	1332 mm	3683 mm
3142 mm		2323 mm	1415 mm	4050 mm	6 / 8 °
3342 mm		2423 mm	1515 mm	4250 mm	6 / 8 °
3542 mm		2523 mm	1615 mm	4450 mm	6 / 8 °
3675 mm		2590 mm	1682 mm	4583 mm	6 / 8 °
4035 mm		2770 mm	1862 mm	4943 mm	6 / 8 °

	4395 mm	2950 mm	2042 mm	5303 mm	6 / 8 °
	5095 mm	3300 mm	2392 mm	6003 mm	6 / 8 °
	5524 mm	3515 mm	2607 mm	6432 mm	6 / 5 °
Triplex mast DZ / Including 3A fork carriage with 4 rollers (standard)	4150 mm	2140 mm	1382 mm	4908 mm	6 / 8 °
	4400 mm	2223 mm	1465 mm	5158 mm	6 / 8 °
	4700 mm	2323 mm	1565 mm	5458 mm	6 / 8 °
	4850 mm	2373 mm	1615 mm	5608 mm	6 / 8 °
	5000 mm	2423 mm	1665 mm	5758 mm	6 / 5 °
	5300 mm	2523 mm	1765 mm	6058 mm	6 / 5 °
	5500 mm	2590 mm	1832 mm	6258 mm	6 / 5 °
	6000 mm	2770 mm	2012 mm	6758 mm	6 / 5 °
	6500 mm	2950 mm	2170 mm	7280 mm	6 / 3 °
	7000 mm	3120 mm	2350 mm	7770 mm	6 / 3 °
Triplex mast DZ / suitable for integrated sideshift 3A with 6 rollers (option)	4150 mm	2140 mm	1232 mm	5058 mm	6 / 8 °
	4400 mm	2223 mm	1315 mm	5308 mm	6 / 8 °
	4700 mm	2323 mm	1415 mm	5608 mm	6 / 8 °
	4850 mm	2373 mm	1465 mm	5758 mm	6 / 8 °
	5000 mm	2423 mm	1515 mm	5908 mm	6 / 5 °
	5300 mm	2523 mm	1765 mm	6058 mm	6 / 5 °
	5500 mm	2590 mm	1682 mm	6408 mm	6 / 5 °
	6000 mm	2770 mm	1862 mm	6908 mm	6 / 5 °
	6500 mm	2950 mm	2042 mm	7408 mm	6 / 3 °
	7000 mm	3120 mm	2212 mm	7908 mm	6 / 3 °
<b>EFG S40, EFG 550</b>	<b>Lift (h3)</b>	<b>Retracted mast height (h1)</b>	<b>Free lift (h2)</b>	<b>Extended mast height (h4)</b>	<b>Forward/backward tilt of mast</b>
	2750 mm	2165 mm	150 mm	3608 mm	6 / 8 °
	Duplex mast ZT / Including 3A fork carriage with 6 rollers (standard) / suitable for integrated sideshift 3A with 6 rollers (option)	3000 mm	2290 mm	150 mm	3858 mm
	3100 mm	2348 mm	150 mm	3958 mm	6 / 8 °

	3300 mm	2440 mm	150 mm	4158 mm	6 / 8 °
	3500 mm	2548 mm	150 mm	4358 mm	6 / 8 °
	3700 mm	2640 mm	150 mm	4558 mm	6 / 8 °
	4000 mm	2795 mm	150 mm	4858 mm	6 / 8 °
	4300 mm	2940 mm	150 mm	5158 mm	6 / 8 °
	4500 mm	3040 mm	150 mm	5358 mm	6 / 8 °
	5000 mm	3290 mm	150 mm	5858 mm	6 / 8 °
	5500 mm	3540 mm	150 mm	6358 mm	6 / 5 °
	2775 mm	2140 mm	1382 mm	3683 mm	6 / 8 °
	3142 mm	2323 mm	1415 mm	4050 mm	6 / 8 °
	3342 mm	2423 mm	1515 mm	4250 mm	6 / 8 °
	3542 mm	2523 mm	1615 mm	4450 mm	6 / 8 °
Duplex mast ZZ / Including 3A fork carriage with 6 rollers (standard) / suitable for integrated sideshift 3A with 6 rollers (option)	3675 mm	2590 mm	1682 mm	4583 mm	6 / 8 °
	4035 mm	2770 mm	1862 mm	4943 mm	6 / 8 °
	4395 mm	2950 mm	2042 mm	5303 mm	6 / 8 °
	5095 mm	3300 mm	2392 mm	6003 mm	6 / 8 °
	5524 mm	3515 mm	2607 mm	6432 mm	6 / 5 °
	4150 mm	2140 mm	1232 mm	5058 mm	6 / 8 °
	4400 mm	2223 mm	1315 mm	5308 mm	6 / 8 °
	4850 mm	2373 mm	1465 mm	5758 mm	6 / 8 °
	5000 mm	2423 mm	1515 mm	5908 mm	6 / 5 °
	5300 mm	2523 mm	1615 mm	6208 mm	6 / 5 °
	5500 mm	2590 mm	1682 mm	6408 mm	6 / 5 °
	6000 mm	2770 mm	1862 mm	6908 mm	6 / 5 °
	6500 mm	2950 mm	2042 mm	7408 mm	6 / 3 °
	7000 mm	3120 mm	2212 mm	7908 mm	6 / 3 °
	7500 mm	3300 mm	2392 mm	8408 mm	6 / 3 °
EFG S50	Lift (h3)	Retracted mast height (h1)	Free lift (h2)	Extended mast height (h4)	Forward/backward tilt of mast

Duplex mast ZT / Including 4A fork carriage with 6 rollers (standard)	2480 mm	2165 mm	150 mm	3453 mm	6 / 8 °
	2846 mm	2348 mm	150 mm	3819 mm	6 / 8 °
	3030 mm	2440 mm	150 mm	4003 mm	6 / 8 °
	3246 mm	2548 mm	150 mm	4219 mm	6 / 8 °
	3430 mm	2640 mm	150 mm	4403 mm	6 / 8 °
	3740 mm	2795 mm	150 mm	4713 mm	6 / 8 °
	4030 mm	2940 mm	150 mm	5003 mm	6 / 8 °
	4230 mm	3040 mm	150 mm	5203 mm	6 / 8 °
	4730 mm	3290 mm	150 mm	5703 mm	6 / 8 °
	5230 mm	3540 mm	150 mm	6203 mm	6 / 5 °
Duplex mast ZT / Suitable for 3A fork carriage with 6 rollers (option) / suitable for integrated sideshift 4A with 6 rollers (option)	2750 mm	2165 mm	150 mm	3608 mm	6 / 8 °
	3000 mm	2290 mm	150 mm	3858 mm	6 / 8 °
	3100 mm	2348 mm	150 mm	3958 mm	6 / 8 °
	3300 mm	2440 mm	150 mm	4158 mm	6 / 8 °
	3500 mm	2548 mm	150 mm	4358 mm	6 / 8 °
	3700 mm	2640 mm	150 mm	4558 mm	6 / 8 °
	4000 mm	2795 mm	150 mm	4858 mm	6 / 8 °
	4300 mm	2940 mm	150 mm	5158 mm	6 / 8 °
	4500 mm	3040 mm	150 mm	5358 mm	6 / 8 °
	5000 mm	3290 mm	150 mm	5858 mm	6 / 8 °
5500 mm	3540 mm	150 mm	6358 mm	6 / 5 °	
Duplex mast ZZ / Including 4A fork carriage with 6 rollers (standard)	2570 mm	2140 mm	1117 mm	3593 mm	6 / 8 °
	2932 mm	2323 mm	1300 mm	3955 mm	6 / 8 °
	3132 mm	2423 mm	1400 mm	4155 mm	6 / 8 °
	3332 mm	2523 mm	1500 mm	4355 mm	6 / 8 °
	3465 mm	2590 mm	1567 mm	4488 mm	6 / 8 °
	3825 mm	2770 mm	1747 mm	4848 mm	6 / 8 °
	4185 mm	2950 mm	1927 mm	5208 mm	6 / 8 °
	4885 mm	3300 mm	2277 mm	5908 mm	6 / 8 °
5314 mm	3515 mm	2492 mm	6337 mm	6 / 5 °	
Duplex mast ZZ / Suitable for 3A fork carriage with 6 rollers (option) / suitable for integrated sideshift 4A with 6 rollers (option)	2725 mm	2140 mm	1232 mm	3633 mm	6 / 8 °

	3092 mm	2323 mm	1415 mm	4000 mm	6 / 8 °
	3292 mm	2423 mm	1515 mm	4200 mm	6 / 8 °
	3492 mm	2523 mm	1615 mm	4400 mm	6 / 8 °
	3625 mm	2590 mm	1682 mm	4533 mm	6 / 8 °
	3985 mm	2770 mm	1862 mm	4893 mm	6 / 8 °
	4345 mm	2950 mm	2042 mm	5253 mm	6 / 8 °
	5045 mm	3300 mm	2392 mm	5953 mm	6 / 8 °
	5474 mm	3515 mm	2607 mm	6382 mm	6 / 5 °
	3875 mm	2140 mm	1117 mm	4898 mm	6 / 8 °
	4120 mm	2223 mm	1200 mm	5143 mm	6 / 8 °
	4420 mm	2323 mm	1300 mm	5443 mm	6 / 8 °
	4720 mm	2423 mm	1400 mm	5743 mm	6 / 8 °
	5020 mm	2523 mm	1500 mm	6043 mm	6 / 5 °
Triplex mast DZ / Including 4A fork carriage with 6 rollers (standard)	5220 mm	2590 mm	1567 mm	6243 mm	6 / 5 °
	5750 mm	2770 mm	1747 mm	6773 mm	6 / 5 °
	6280 mm	2950 mm	1927 mm	7303 mm	6 / 5 °
	6780 mm	3120 mm	2097 mm	7803 mm	6 / 5 °
	7320 mm	3300 mm	2277 mm	8343 mm	6 / 5 °
	4050 mm	2140 mm	1232 mm	4958 mm	6 / 8 °
	4300 mm	2223 mm	1315 mm	5208 mm	6 / 8 °
	4600 mm	2323 mm	1415 mm	5508 mm	6 / 8 °
	4900 mm	2423 mm	1515 mm	5808 mm	6 / 8 °
	5200 mm	2523 mm	1615 mm	6108 mm	6 / 5 °
Triplex mast DZ / Suitable for 3A fork carriage with 6 rollers (option) / suitable for integrated sideshift 4A with 6 rollers (option)	5400 mm	2590 mm	1682 mm	6308 mm	6 / 5 °
	5720 mm	2700 mm	1792 mm	6628 mm	6 / 5 °
	5930 mm	2770 mm	1862 mm	6838 mm	6 / 5 °
	6460 mm	2950 mm	2042 mm	7368 mm	6 / 5 °
	6960 mm	3120 mm	2212 mm	7868 mm	6 / 5 °
	7500 mm	3300 mm	2392 mm	8408 mm	6 / 5 °

## VDI table

Characteristic	1.1	Manufacturer (abbreviated description)		Jungheinrich							
	1.3	Drive		Electric							
	1.4	Operation		Seat							
	1.5	Load capacity/load	Q kg	3500	4000		4500		4990	5000	
	1.6	Load centre distance	c mm	500		600	500			600	
	1.8	Load distance, centre of drive axle to fork	x mm	519	532					547	
	1.9	Wheelbase	y mm	1856		2000	2080	1856	2000		2080
Weights	2.1.1	Service weight (incl. battery)	kg	5968	6711	6701	7143	7153	7143	7592	8036
	2.2	Axle load laden front/rear	kg	8521 / 947	9752 / 959	9726 / 975	9992 / 1151	10575 / 1078	10468 / 1160	11434 / 1158	11677 / 1359
	2.3	Axle load unladen front/rear	kg	3097 / 2871	3536 / 3175	3706 / 2995	3858 / 3285	3626 / 3527	3744 / 3399	3836 / 3756	3932 / 4104
Wheels/suspension system	3.1	Tyres		Super-elastic (SE)							
	3.2	Tyre size, front		250-15		28x12,5-15	28 x 12, 5-15				
	3.3	Tyre size, rear		21 x 8-9		23x10-12	21 x 8-9			23x10-12	
	3.5	Wheels, number front/back (x=driven)		2x/2							
	3.6	Tread width, front	b10 mm	1115		1155					
	3.7	Tread width, rear	b11 mm	950		1200	950		1200		
	Basic dimensions	4.1	Forward/backward tilt of mast	a/β °	6 / 8						
4.2		Retracted mast height (h1)	h1 mm	2300	2290				2440		
4.3		Free lift (h2)	h2 mm	150							
4.4		Lift (h3)	h3 mm	3100	3000					3030	
4.5		Extended mast height (h4)	h4 mm	3889	3715		3858	3715		3858	4003
4.7		Height of overhead guard (cab)	h6 mm	2365			2350				
4.8		Seat height/stand height	h7 mm	1313			1303				
4.12		Coupling height	h10 mm	396							
4.12.1		2. Coupling height	mm	566							
4.19		total length	l1 mm	3805	3818	3962	4102	3818	3962	4102	
4.20		Length including fork shank	l2 mm	2655	2668	2812	2952	2668	2812		2952
4.21.1		total width	b1 mm	1340			1450				
4.22		Fork dimensions	s/e/l mm	45 x 125 x 1150	50 x 125 x 1150				50 x 150 x 1150	60 x 150 x 1150	
4.23		Fork carriage connection class		3A							4A
4.24		Fork carriage width	b3 mm	1120	1260						
4.31		Ground clearance laden under mast	m1 mm	143	179		166				
4.32		Ground clearance centre of wheelbase	m2 mm	150							
4.34.1	Aisle width (pallet 1000x1200 sideways)	Ast mm	4003	4092	4222	4412	4092	4222	4427		
4.34.2	Aisle width (pallet 800x1200 length)	Ast mm	4203	4292	4422	4612	4292	4422	4627		
4.35	Turning radius	Wa mm	2284	2360	2490	2680	2360	2490	2680		
4.36	Smallest pivot point distance	b13 mm	660		721	673	660	721	673		

Performance data	5.1	Travel speed laden/unladen (Efficiency   drivePLUS)	km/h	14 / 17   16 / 16	13 / 16   16 / 16		13 / 16   15 / 16	13 / 16   16 / 16	12 / 15   15 / 16			
	5.2	Lift speed laden/unladen (Efficiency   liftPLUS)	m/s	0.36 / 0.5   0.42 / 0.55	0.28 / 0.37   0.33 / 0.44					0.28 / 0.37   0.31 / 0.44		
	5.3	Lowering speed laden/unladen (Efficiency   liftPLUS)	m/s	0.56 / 0.56   0.56 / 0.56	0.55 / 0.5   0.55 / 0.5							
	5.5	Drawbar pull laden/unladen (Efficiency   drivePLUS)	N	5300 / 5800   5300 / 5800	5100 / 5600   5100 / 5600		4900 / 5500   4900 / 5500		4800 / 5400   4800 / 5400		4700 / 5300   4700 / 5300	
	5.6	Max. drawbar pull laden/unladen (Efficiency   drivePLUS)	N	17100 / 17100   17100 / 17100	17700 / 17700   17700 / 17700		18200 / 18200   18200 / 18200					
	5.7	Gradeability laden/unladen (Efficiency   drivePLUS)	%	10.2 / 16.7   11.5 / 19	9.3 / 15.4   10.8 / 17.7		8.1 / 13.5   9.4 / 15.8		7.5 / 13.5   8.8 / 15.8		7.1 / 12.7   8.4 / 15	
	5.8	Max. gradeability laden/unladen (Efficiency   drivePLUS)	%	18.3 / 29   19.1 / 31.1	17 / 26.9   17.2 / 28.6	17 / 27   17.3 / 28.6	16.5 / 25.7   16.6 / 27.1	15.9 / 25.7   15.8 / 27.1	16 / 25.7   15.9 / 27.1	14.9 / 24.5   14.4 / 25.6	14.4 / 23.2   13.7 / 24.1	
	5.9	Acceleration time laden/unladen (Efficiency   drivePLUS)	s	7.7 / 7   7 / 6.7	8 / 7.2   7 / 6.7		8.1 / 7.3   7.1 / 6.8		8.2 / 7.3   7.1 / 6.8		8.4 / 7.4   7.2 / 6.8	
	5.10	Service brake		Friction brake (mechanically operated)								
	E-motor/Electronics	6.1	Drive motor, performance S2 60 min (Efficiency   drivePLUS)	kW	14.5   18							
6.2		Lift motor, performance with S3 (Efficiency   liftPLUS)	kW	20   24								
6.3		Battery according to DIN 43531/35/36		DIN 43536 A								
6.4		Battery voltage/nominal capacity	V / Ah	80 / 775		80 / 930		80 / 775		80 / 930		
6.5		Battery weight	kg	1863		2178		1863		2178		
6.6.1		Energy consumption according to EN cycle (Efficiency   PLUS)	kWh/h	6.6   6.6	7   7.1		7.2   7.3		7.6   7.8		8   8	8.7   8.7
6.6.2		CO2 equivalent according to EN ISO 23308 (Efficiency   PLUS)	kg/h0	3.6   3.6	3.8   3.8		3.9   3.9		4.1   4.2		4.3   4.3	4.7   4.7
6.7		Throughput (Efficiency   PLUS)	t/h	205   218	232   242		227   238		247   259		264   284	266   290
6.8	Turnover efficiency according to VDI 2198 (Efficiency   PLUS)	t/kWh	22.6   22	24.7   23.3		23.2   22.2		26.3   24		26.9   26.1	26.6   26.2	
Other	8.1	Type of drive control		Impulse/AC								
	10.1	Operating pressure for attachment	bar	200								
	10.2	Oil flow for attachments	l/min	30								
	10.7	Sound pressure level according to EN12053	dB (A)	69								
	10.8	Trailer coupling, model/type DIN		DIN 15170 H								
- This data sheet according to VDI guideline 2198 only states the technical values of the standard truck. Different tyres, other masts, additional equipment etc. may result in different values.												

- 6.6.1: 45 EN cycles/h
- VDI no. 6.7: PLUS refers to the drive&liftPLUS performance package
- VDI no. 6.8.1: PLUS refers to the drive&liftPLUS performance package

The German production facilities in  
Norderstedt, Moosburg and Landsberg are  
certified as well as our Genuine Parts  
Center in Kaltenkirchen.

ISO 9001  
ISO 14001

Jungheinrich fork lift trucks meet European  
safety requirements.



 **JUNGHEINRICH**

The logo features a red upward-pointing arrow integrated into the letter 'J' of the word 'JUNGHEINRICH', which is written in a bold, black, sans-serif font.