



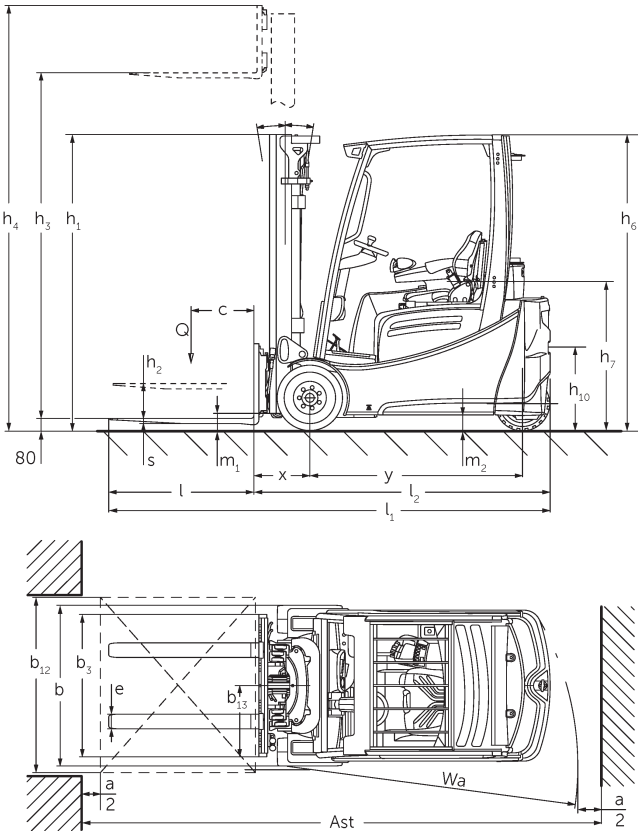
## **Electric three-wheel counterbalance forklift truck**

**EFG 213-220**

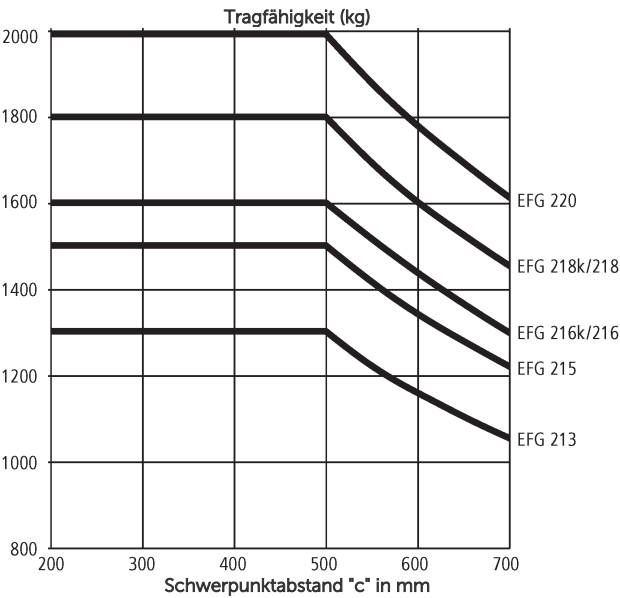
Lift height: 2020-7000 mm / Load capacity: 1300-2000 kg



EFG 213-220



EFG 2 technische Zeichnung 2017



# EFG 213-220

| EFG 213, EFG 215, EFG 216k, EFG 216 | Lift (h3) | Retracted mast height (h1) | Free lift (h2) | Extended mast height (h4) | Forward/backward tilt of mast |
|-------------------------------------|-----------|----------------------------|----------------|---------------------------|-------------------------------|
| Duplex mast ZT                      | 3000 mm   | 2060 mm                    | 150 mm         | 3590 mm                   | 7 / 6 °                       |
|                                     | 3100 mm   | 2110 mm                    | 150 mm         | 3690 mm                   | 7 / 6 °                       |
|                                     | 3300 mm   | 2210 mm                    | 150 mm         | 3890 mm                   | 7 / 7 °                       |
|                                     | 3500 mm   | 2310 mm                    | 150 mm         | 4090 mm                   | 7 / 7 °                       |
|                                     | 3700 mm   | 2410 mm                    | 150 mm         | 4290 mm                   | 7 / 7 °                       |
|                                     | 4000 mm   | 2560 mm                    | 150 mm         | 4590 mm                   | 7 / 7 °                       |
|                                     | 4500 mm   | 2810 mm                    | 150 mm         | 5090 mm                   | 7 / 7 °                       |
| Duplex mast ZZ                      | 2900 mm   | 1965 mm                    | 1375 mm        | 3490 mm                   | 7 / 6 °                       |
|                                     | 3100 mm   | 2065 mm                    | 1475 mm        | 3690 mm                   | 7 / 6 °                       |
|                                     | 3180 mm   | 2105 mm                    | 1515 mm        | 3770 mm                   | 7 / 7 °                       |
|                                     | 3300 mm   | 2165 mm                    | 1575 mm        | 3890 mm                   | 7 / 7 °                       |
|                                     | 3500 mm   | 2265 mm                    | 1675 mm        | 4090 mm                   | 7 / 7 °                       |
|                                     | 3700 mm   | 2365 mm                    | 1775 mm        | 4290 mm                   | 7 / 7 °                       |
|                                     | 4000 mm   | 2515 mm                    | 1925 mm        | 4590 mm                   | 7 / 7 °                       |
| Triplex mast DZ                     | 4250 mm   | 1975 mm                    | 1385 mm        | 4840 mm                   | 7 / 4 °                       |
|                                     | 4400 mm   | 2025 mm                    | 1435 mm        | 4990 mm                   | 7 / 4 °                       |
|                                     | 4640 mm   | 2105 mm                    | 1515 mm        | 5230 mm                   | 7 / 5 °                       |
|                                     | 4700 mm   | 2125 mm                    | 1535 mm        | 5290 mm                   | 7 / 5 °                       |
|                                     | 4800 mm   | 2165 mm                    | 1575 mm        | 5390 mm                   | 7 / 5 °                       |
|                                     | 5000 mm   | 2235 mm                    | 1645 mm        | 5590 mm                   | 7 / 5 °                       |
|                                     | 5500 mm   | 2415 mm                    | 1825 mm        | 6090 mm                   | 7 / 5 °                       |
|                                     | 6000 mm   | 2585 mm                    | 1995 mm        | 6590 mm                   | 7 / 5 °                       |
|                                     | 6500 mm   | 2765 mm                    | 2175 mm        | 7090 mm                   | 7 / 5 °                       |
|                                     | 7000 mm   | 2935 mm                    | 2345 mm        | 7590 mm                   | 7 / 5 °                       |
| EFG 218k, EFG 218, EFG 220          | Lift (h3) | Retracted mast height (h1) | Free lift (h2) | Extended mast height (h4) | Forward/backward tilt of mast |
| Duplex mast ZT                      | 2020 mm   | 1577 mm                    | 150 mm         | 2632 mm                   | 7 / 5 °                       |

|                 |         |         |         |         |         |
|-----------------|---------|---------|---------|---------|---------|
|                 | 3000 mm | 2067 mm | 150 mm  | 3612 mm | 7 / 6 ° |
|                 | 3100 mm | 2117 mm | 150 mm  | 3712 mm | 7 / 6 ° |
|                 | 3300 mm | 2217 mm | 150 mm  | 3912 mm | 7 / 7 ° |
|                 | 3500 mm | 2317 mm | 150 mm  | 4112 mm | 7 / 7 ° |
|                 | 3700 mm | 2417 mm | 150 mm  | 4312 mm | 7 / 7 ° |
|                 | 4000 mm | 2567 mm | 150 mm  | 4612 mm | 7 / 7 ° |
|                 | 4500 mm | 2817 mm | 150 mm  | 5112 mm | 7 / 7 ° |
|                 | 2900 mm | 1972 mm | 1330 mm | 3542 mm | 7 / 6 ° |
| Duplex mast ZZ  | 3100 mm | 2072 mm | 1430 mm | 3742 mm | 7 / 6 ° |
|                 | 3180 mm | 2112 mm | 1470 mm | 3822 mm | 7 / 7 ° |
|                 | 3300 mm | 2172 mm | 1530 mm | 3942 mm | 7 / 7 ° |
|                 | 3500 mm | 2272 mm | 1630 mm | 4142 mm | 7 / 7 ° |
|                 | 3700 mm | 2372 mm | 1730 mm | 4342 mm | 7 / 7 ° |
|                 | 4000 mm | 2522 mm | 1880 mm | 4642 mm | 7 / 7 ° |
|                 | 4250 mm | 1982 mm | 1340 mm | 4892 mm | 7 / 6 ° |
| Triplex mast DZ | 4400 mm | 2032 mm | 1390 mm | 5042 mm | 7 / 6 ° |
|                 | 4640 mm | 2112 mm | 1470 mm | 5282 mm | 7 / 5 ° |
|                 | 4700 mm | 2132 mm | 1490 mm | 5342 mm | 7 / 5 ° |
|                 | 4800 mm | 2172 mm | 1530 mm | 5442 mm | 7 / 5 ° |
|                 | 5000 mm | 2242 mm | 1600 mm | 5642 mm | 7 / 5 ° |
|                 | 5500 mm | 2422 mm | 1780 mm | 6142 mm | 7 / 5 ° |
|                 | 6000 mm | 2592 mm | 1950 mm | 6642 mm | 7 / 5 ° |
|                 | 6500 mm | 2772 mm | 2130 mm | 7142 mm | 7 / 5 ° |
|                 | 7000 mm | 2942 mm | 2300 mm | 7642 mm | 7 / 5 ° |
|                 |         |         |         |         |         |

# VDI table

|                  |                                         |                                             |                                |      |                    |             |             |             |             |             |                 |
|------------------|-----------------------------------------|---------------------------------------------|--------------------------------|------|--------------------|-------------|-------------|-------------|-------------|-------------|-----------------|
| Characteristic   | 1.1                                     | Manufacturer (abbreviated description)      |                                |      | Jungheinrich       |             |             |             |             |             |                 |
|                  | 1.2                                     | Manufacturer's type designation             |                                |      | EFG 213            | EFG 215     | EFG 216k    | EFG 216     | EFG 218k    | EFG 218     | EFG 220         |
|                  | 1.3                                     | Drive type                                  |                                |      | electric           |             |             |             |             |             |                 |
|                  | 1.4                                     | Operation                                   |                                |      | Seat               |             |             |             |             |             |                 |
|                  | 1.5                                     | Load capacity/load                          | Q                              | kg   | 1300               | 1500        | 1600        |             | 1800        |             | 2000            |
|                  | 1.6                                     | Load centre distance                        | c                              | mm   | 500                |             |             |             |             |             |                 |
|                  | 1.8                                     | Load distance, centre of drive axle to fork | x                              | mm   | 344                |             |             |             | 364         |             |                 |
|                  | 1.9                                     | Wheelbase                                   | y                              | mm   | 1249               |             | 1357        | 1465        | 1357        | 1465        |                 |
|                  | Weights                                 | 2.1.1                                       | Service weight (incl. battery) | kg   |                    | 2692        | 2937        | 2959        | 3018        | 3240        | 3191            |
| 2.2              |                                         | Axle load laden front/rear                  | kg                             |      | 3534 / 458         | 3860 / 577  | 4043 / 516  | 4050 / 566  | 4457 / 583  | 4477 / 514  | 4784 / 582      |
| 2.3              |                                         | Axle load unladen front/rear                | kg                             |      | 1307 / 1385        | 1290 / 1647 | 1392 / 1567 | 1479 / 1539 | 1423 / 1817 | 1534 / 1657 | 1514 / 1852     |
| Wheels/chassis   | 3.1                                     | Tyres                                       |                                |      | Super-elastic (SE) |             |             |             |             |             |                 |
|                  | 3.2                                     | Tyre size, front                            |                                |      | 18 x 7-8           |             |             |             | 200 / 50-10 |             |                 |
|                  | 3.3                                     | Tyre size, rear                             |                                |      | 140 / 55-9         |             |             |             |             |             |                 |
|                  | 3.5                                     | Wheels, number front/back (x=driven)        |                                |      | 2x/2               |             |             |             |             |             |                 |
|                  | 3.6                                     | Tread width, front                          | b10                            | mm   | 904                |             |             |             | 914         |             |                 |
|                  | 3.7                                     | Tread width, rear                           | b11                            | mm   | 176                |             |             |             |             |             |                 |
| Basic dimensions | 4.1                                     | Forward/backward tilt of mast               | a/β                            | °    | 7 / 6              |             |             |             |             |             |                 |
|                  | 4.2                                     | Retracted mast height (h1)                  | h1                             | mm   | 2060               |             |             |             | 2067        |             |                 |
|                  | 4.3                                     | Free lift (h2)                              | h2                             | mm   | 150                |             |             |             |             |             |                 |
|                  | 4.4                                     | Lift (h3)                                   | h3                             | mm   | 3000               |             |             |             |             |             |                 |
|                  | 4.5                                     | Extended mast height (h4)                   | h4                             | mm   | 3590               |             |             |             | 3612        |             |                 |
|                  | 4.7                                     | Height of overhead guard (cab)              | h6                             | mm   | 2040               |             |             |             |             |             |                 |
|                  | 4.8                                     | Seat height/stand height                    | h7                             | mm   | 920                |             |             |             |             |             |                 |
|                  | 4.12                                    | Coupling height                             | h10                            | mm   | 560                |             |             |             |             |             |                 |
|                  | 4.19                                    | Total length                                | l1                             | mm   | 2933               |             | 3041        | 3149        | 3061        | 3169        |                 |
|                  | 4.20                                    | Length including fork shank                 | l2                             | mm   | 1783               |             | 1891        | 1999        | 1911        | 2019        |                 |
|                  | 4.21.1                                  | total width                                 | b1                             | mm   | 1060               |             |             |             | 1120        |             |                 |
|                  | 4.22                                    | Fork dimensions                             | s/<br>e/l                      | mm   | 40 x 80 x 1150     |             |             |             |             |             | 40 x 100 x 1150 |
|                  | 4.23                                    | Fork carriage connection class              |                                |      | 2A                 |             |             |             |             |             |                 |
|                  | 4.24                                    | Fork carriage width                         | b3                             | mm   | 980                |             |             |             |             |             |                 |
|                  | 4.31                                    | Ground clearance laden under mast           | m1                             | mm   | 97                 |             |             |             | 105         |             |                 |
| 4.32             | Ground clearance centre of wheelbase    | m2                                          | mm                             | 100  |                    |             |             |             |             |             |                 |
| 4.34.1           | Aisle width (pallet 1000x1200 sideways) | Ast                                         | mm                             | 3112 |                    | 3220        | 3327        | 3238        | 3345        |             |                 |

|                                                                                                                                                                                                   |                                           |                                           |        |      |                                  |               |               |               |               |               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-------------------------------------------|--------|------|----------------------------------|---------------|---------------|---------------|---------------|---------------|
|                                                                                                                                                                                                   | 4.34.2                                    | Aisle width (pallet 800x1200 length)      | Ast    | mm   | 3235                             |               | 3343          | 3450          | 3362          | 3469          |
|                                                                                                                                                                                                   | 4.35                                      | Turning radius                            | Wa     | mm   | 1440                             |               | 1548          | 1655          | 1548          | 1655          |
|                                                                                                                                                                                                   | 4.36                                      | Smallest pivot point distance             | b13    | mm   | 0                                |               |               |               |               |               |
| Performance data                                                                                                                                                                                  | 5.1                                       | Travel speed laden/unladen                | km/h   |      | 16 / 16                          |               |               |               |               |               |
|                                                                                                                                                                                                   | 5.2                                       | Lift speed laden/unladen                  | m/s    |      | 0.51 / 0.74                      |               |               | 0.46 / 0.74   |               | 0.45 / 0.63   |
|                                                                                                                                                                                                   | 5.3                                       | Lowering speed laden/unladen              | m/s    |      | 0.55 / 0.55                      |               |               |               |               |               |
|                                                                                                                                                                                                   | 5.5                                       | Drawbar pull laden                        | N      |      | 2300                             | 2200          | 2150          | 2100          | 2000          | 1900          |
|                                                                                                                                                                                                   | 5.6                                       | Max. drawbar pull laden/unladen           | N      |      | 13000 / 11100                    | 13000 / 10900 | 13000 / 12000 | 13000 / 12600 | 12500 / 12100 | 12500 / 12500 |
|                                                                                                                                                                                                   | 5.7                                       | Gradeability laden/unladen                | %      |      | 7.6 / 12.5                       | 7.3 / 12.3    |               | 7 / 11.5      | 6.2 / 10.7    | 5.9 / 10.5    |
|                                                                                                                                                                                                   | 5.8                                       | Max. gradeability laden/unladen           | %      |      | 28 / 31                          | 27 / 28       | 27 / 31       | 27 / 33       | 25 / 29       | 25 / 31       |
|                                                                                                                                                                                                   | 5.9                                       | Acceleration time laden/unladen           | s      |      | 5.5 / 5.1                        | 5.6 / 5.2     | 5.7 / 5.2     |               | 5.8 / 5.3     |               |
|                                                                                                                                                                                                   | 5.10                                      | Service brake                             |        |      | Reibbremse (mechanisch betätigt) |               |               |               |               |               |
| Electric motor/electronics                                                                                                                                                                        | 6.1                                       | Drive motor, performance S2 60 min        | kW     |      | 4.5                              |               |               |               |               |               |
|                                                                                                                                                                                                   | 6.1.1                                     | 2. Drive motor, performance S2 60 min     | kW     |      | 4.5                              |               |               |               |               |               |
|                                                                                                                                                                                                   | 6.2                                       | Lift motor, performance with S3           | kW     |      | 11.5                             |               |               |               |               |               |
|                                                                                                                                                                                                   | 6.3                                       | Battery according to DIN 43531/35/36      |        |      | DIN 43531 A                      |               |               |               |               |               |
|                                                                                                                                                                                                   | 6.4                                       | Battery voltage/nominal capacity          | V / Ah |      | 48 / 500                         |               | 48 / 625      | 48 / 750      | 48 / 625      | 48 / 750      |
|                                                                                                                                                                                                   | 6.5                                       | Battery weight                            | kg     |      | 715                              |               | 855           | 1025          | 855           | 1025          |
|                                                                                                                                                                                                   | 6.6.1                                     | Energy consumption according to EN cycle  | kWh/h  |      | 3.5                              | 3.7           | 3.9           |               | 4.1           |               |
|                                                                                                                                                                                                   | 6.6.2                                     | CO2 equivalent as per EN 16796            | kg/h   |      | 1.9                              | 2             | 2.1           |               | 2.2           |               |
|                                                                                                                                                                                                   | 6.7                                       | Throughput                                | t/h    |      | 105                              | 111           | 113           |               | 126           |               |
| 6.8                                                                                                                                                                                               | Turnover efficiency according to VDI 2198 | t/kWh                                     |        | 22.3 | 23.1                             |               |               | 23.3          |               |               |
| Other                                                                                                                                                                                             | 8.1                                       | Type of drive control                     |        |      | Impulse/AC                       |               |               |               |               |               |
|                                                                                                                                                                                                   | 10.1                                      | Operating pressure for attachment         | bar    |      | 230                              |               |               |               |               |               |
|                                                                                                                                                                                                   | 10.2                                      | Oil flow for attachments                  | l/min  |      | 27                               |               |               |               |               |               |
|                                                                                                                                                                                                   | 10.7                                      | Sound pressure level according to EN12053 | dB (A) |      | 67                               |               |               |               |               |               |
|                                                                                                                                                                                                   | 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: 60 working cycles / h

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.



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