

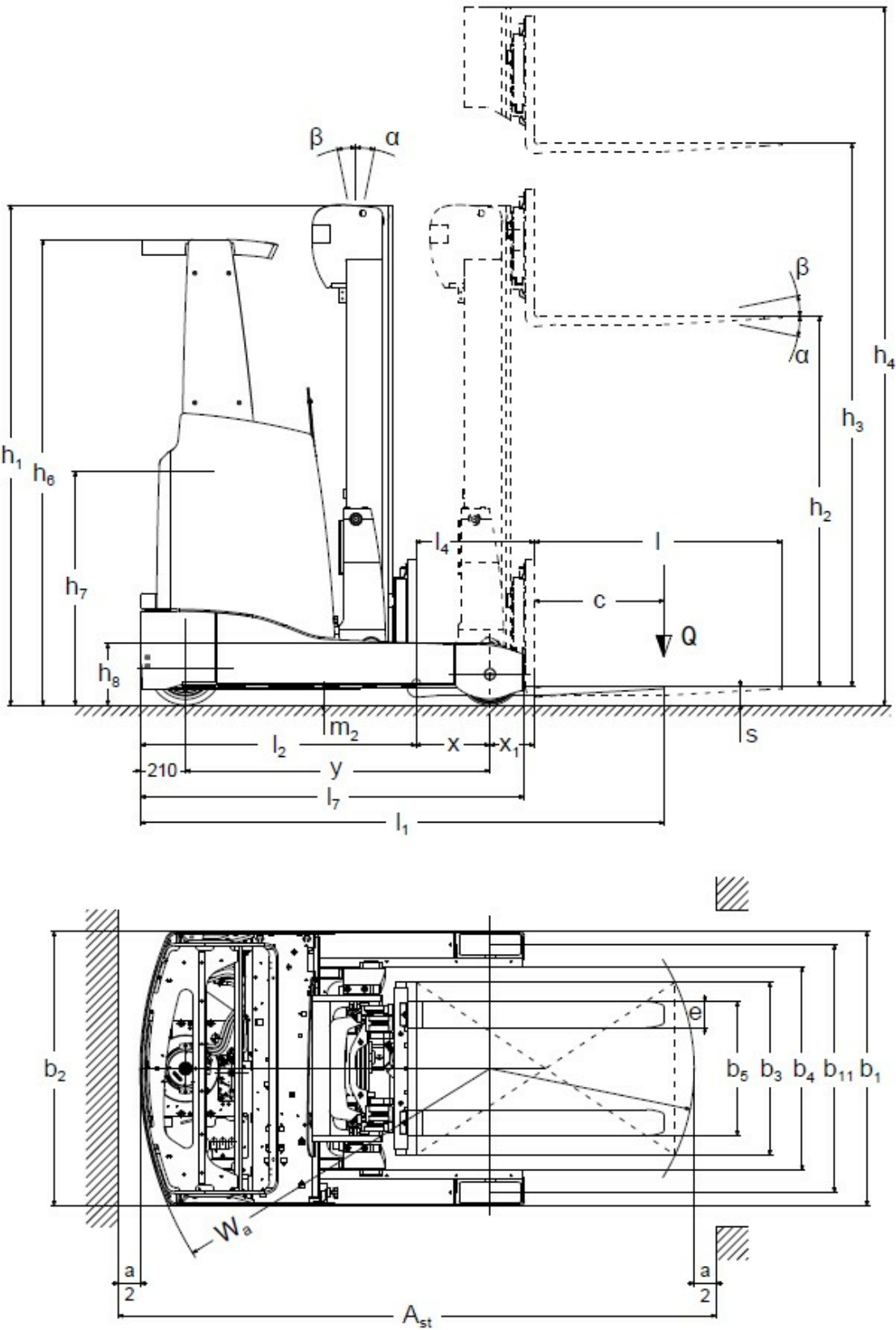


## Electric reach truck

**ETV MC 320**

Lift height: 5000-13000 mm / Load capacity: 2000 kg

ETV MC 320



# ETV MC 320

| ETV MC 320                                | Lift (h3) | Retracted mast height (h1) | Free lift (h2) | Extended mast height (h4) | Forward/backward tilt of mast | Forward/backward tilt of fork carriage |
|-------------------------------------------|-----------|----------------------------|----------------|---------------------------|-------------------------------|----------------------------------------|
| Fork tilt / Triplex mast DZ / cold-formed | 5000 mm   | 2300 mm                    | 1560 mm        | 5740 mm                   |                               | 2 / 5 °                                |
|                                           | 5300 mm   | 2400 mm                    | 1660 mm        | 6040 mm                   |                               | 2 / 5 °                                |
|                                           | 5900 mm   | 2600 mm                    | 1860 mm        | 6640 mm                   |                               | 2 / 5 °                                |
|                                           | 6200 mm   | 2700 mm                    | 1960 mm        | 6940 mm                   |                               | 2 / 5 °                                |
|                                           | 6500 mm   | 2800 mm                    | 2060 mm        | 7240 mm                   |                               | 2 / 5 °                                |
|                                           | 6800 mm   | 2900 mm                    | 2160 mm        | 7540 mm                   |                               | 2 / 5 °                                |
|                                           | 7100 mm   | 3000 mm                    | 2260 mm        | 7840 mm                   |                               | 2 / 5 °                                |
|                                           | 7700 mm   | 3200 mm                    | 2460 mm        | 8440 mm                   |                               | 2 / 5 °                                |
|                                           | 8420 mm   | 3440 mm                    | 2700 mm        | 9160 mm                   |                               | 2 / 5 °                                |
|                                           | 9020 mm   | 3640 mm                    | 2900 mm        | 9760 mm                   |                               | 2 / 5 °                                |
|                                           | 9110 mm   | 3670 mm                    | 2930 mm        | 9850 mm                   |                               | 2 / 5 °                                |
|                                           | 9620 mm   | 3840 mm                    | 3100 mm        | 10360 mm                  |                               | 2 / 5 °                                |
|                                           | 9950 mm   | 3950 mm                    | 3210 mm        | 10690 mm                  |                               | 2 / 5 °                                |
|                                           | 10220 mm  | 4040 mm                    | 3300 mm        | 10950 mm                  |                               | 2 / 5 °                                |
|                                           | 10520 mm  | 4140 mm                    | 3400 mm        | 11260 mm                  |                               | 2 / 5 °                                |
|                                           | 10700 mm  | 4200 mm                    | 3460 mm        | 11440 mm                  |                               | 2 / 5 °                                |
|                                           | 10880 mm  | 4260 mm                    | 3520 mm        | 11620 mm                  |                               | 2 / 5 °                                |
|                                           | 11120 mm  | 4340 mm                    | 3600 mm        | 11860 mm                  |                               | 2 / 5 °                                |
|                                           | 11510 mm  | 4470 mm                    | 3730 mm        | 12250 mm                  |                               | 2 / 5 °                                |
|                                           | 12020 mm  | 4710 mm                    | 3970 mm        | 12760 mm                  |                               | 2 / 5 °                                |
|                                           | 12530 mm  | 4880 mm                    | 4140 mm        | 13270 mm                  |                               | 2 / 5 °                                |
|                                           | 13000 mm  | 5036 mm                    | 4296 mm        | 13738 mm                  |                               | 2 / 5 °                                |
| Mast tilt / Triplex mast DZ / cold-formed | 5000 mm   | 2300 mm                    | 1560 mm        | 5740 mm                   | 1 / 5 °                       |                                        |
|                                           | 5300 mm   | 2400 mm                    | 1660 mm        | 6040 mm                   | 1 / 5 °                       |                                        |
|                                           | 5900 mm   | 2600 mm                    | 1860 mm        | 6640 mm                   | 1 / 3 °                       |                                        |
|                                           | 6200 mm   | 2700 mm                    | 1960 mm        | 6940 mm                   | 1 / 3 °                       |                                        |

|  |         |         |         |         |           |
|--|---------|---------|---------|---------|-----------|
|  | 6500 mm | 2800 mm | 2060 mm | 7240 mm | 0.5 / 2 ° |
|  | 6800 mm | 2900 mm | 2160 mm | 7540 mm | 0.5 / 2 ° |
|  | 7100 mm | 3000 mm | 2260 mm | 7840 mm | 0.5 / 2 ° |
|  | 7700 mm | 3200 mm | 2460 mm | 8440 mm | 0.5 / 1 ° |
|  | 8420 mm | 3440 mm | 2700 mm | 9160 mm | 0.5 / 1 ° |
|  | 9020 mm | 3640 mm | 2900 mm | 9760 mm | 0.5 / 1 ° |

## VDI table

|                  |        |                                                            |       |    |                   |
|------------------|--------|------------------------------------------------------------|-------|----|-------------------|
| Characteristic   | 1.1    | Manufacturer (abbreviated description)                     |       |    | Jungheinrich      |
|                  | 1.2    | Manufacturer's type designation                            |       |    | ETV MC 320        |
|                  | 1.3    | Drive type                                                 |       |    | electric          |
|                  | 1.4    | Operation                                                  |       |    | Sideways-seated   |
|                  | 1.5    | Load capacity/load                                         | Q     | kg | 2000              |
|                  | 1.6    | Load centre distance                                       | c     | mm | 600               |
|                  | 1.8    | Load distance, centre of drive axle to fork                | x     | mm | 463               |
|                  | 1.8.1  | Load distance, centre of drive axle to fork, mast extended |       | mm | 205               |
|                  | 1.9    | Wheelbase                                                  | y     | mm | 1560              |
| Weights          | 2.1.1  | Service weight (incl. battery)                             |       | kg | 3522              |
|                  | 2.3    | Axle load unladen front/rear                               |       | kg | 2204 / 1318       |
|                  | 2.4    | Axle load fork forward laden front/rear                    |       | kg | 610 / 4912        |
|                  | 2.5    | Axle load fork back laden front/rear                       |       | kg | 2015 / 3507       |
|                  |        |                                                            |       |    |                   |
| Wheels/chassis   | 3.1    | Tyres                                                      |       |    | Polyurethane (PU) |
|                  | 3.2    | Tyre size, front                                           |       |    | Ø 343 x 114       |
|                  | 3.3    | Tyre size, rear                                            |       |    | Ø 285 x 100       |
|                  | 3.5    | Wheels, number front/back (x=driven)                       |       |    | 1x / 2            |
|                  | 3.7    | Tread width, rear                                          | b11   | mm | 1136              |
| Basic dimensions | 4.1    | Forward/backward tilt of mast                              | a/β   | °  | 1 / 5             |
|                  | 4.2    | Retracted mast height (h1)                                 | h1    | mm | 2400              |
|                  | 4.3    | Free lift (h2)                                             | h2    | mm | 1800              |
|                  | 4.4    | Lift (h3)                                                  | h3    | mm | 5300              |
|                  | 4.5    | Extended mast height (h4)                                  | h4    | mm | 6040              |
|                  | 4.7    | Height of overhead guard (cab)                             | h6    | mm | 2154              |
|                  | 4.8    | Seat height/stand height                                   | h7    | mm | 1068              |
|                  | 4.10   | Height of support arms                                     | h8    | mm | 285               |
|                  | 4.19   | Total length                                               | l1    | mm | 2457              |
|                  | 4.20   | Length including fork shank                                | l2    | mm | 1307              |
|                  | 4.21.1 | total width                                                | b1    | mm | 1270              |
|                  | 4.21.2 | total width                                                | b2    | mm | 1270              |
|                  | 4.22   | Fork dimensions                                            | s/e/l | mm | 40 x 120 x 1150   |
|                  | 4.23   | Fork carriage connection class                             |       |    | 2B                |
|                  | 4.24   | Fork carriage width                                        | b3    | mm | 800               |
|                  | 4.25   | Width across forks                                         | b5    | mm | 335               |
|                  | 4.26   | Width between support arms/loading areas                   | b4    | mm | 940               |
|                  | 4.28   | Reach distance                                             |       | mm | 662               |
|                  | 4.32   | Ground clearance centre of wheelbase                       | m2    | mm | 80                |
|                  | 4.34.1 | Aisle width (pallet 1000×1200 sideways)                    | Ast   | mm | 2775              |
|                  | 4.34.2 | Aisle width (pallet 800x1200 length)                       | Ast   | mm | 2809              |
|                  | 4.35   | Turning radius                                             | Wa    | mm | 1770              |
|                  | 4.37   | Length over the support arms                               | L7    | mm | 1930              |

|                                                                                                                                                                                                   |       |                                                              |        |                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------------------------------------------------------------|--------|-------------------------|
| Performance data                                                                                                                                                                                  | 5.1   | Travel speed laden/unladen (Efficiency   drivePLUS)          | km/h   | 11 / 11   14 / 14       |
|                                                                                                                                                                                                   | 5.2   | Lift speed laden/unladen (Efficiency   liftPLUS)             | m/s    | 0.3 / 0.6   0.42 / 0.64 |
|                                                                                                                                                                                                   | 5.3   | Lowering speed laden/unladen (Efficiency   liftPLUS)         | m/s    | 0.55 / 0.5   0.55 / 0.5 |
|                                                                                                                                                                                                   | 5.4   | Reach speed laden/unladen (Efficiency   liftPLUS)            | m/s    | 0.2 / 0.2   0.2 / 0.2   |
|                                                                                                                                                                                                   | 5.7   | Gradeability laden/unladen (Efficiency   drivePLUS)          | %      | 7 / 11   7 / 11         |
|                                                                                                                                                                                                   | 5.8   | Max. gradeability laden/unladen (Efficiency   drivePLUS)     | %      | 10 / 15   10 / 15       |
|                                                                                                                                                                                                   | 5.9   | Acceleration time laden/unladen (Efficiency   drivePLUS)     | s      | 5.6 / 5   4.8 / 4.6     |
|                                                                                                                                                                                                   | 5.10  | Service brake                                                |        | electric                |
| Electric motor/electronics                                                                                                                                                                        | 6.1   | Drive motor, performance S2 60 min (Efficiency   drivePLUS)  | kW     | 6   8.5                 |
|                                                                                                                                                                                                   | 6.2   | Lift motor, performance with S3 (Efficiency   liftPLUS)      | kW     | 13.3   15.5             |
|                                                                                                                                                                                                   | 6.3   | Battery according to DIN 43531/35/36                         |        | DIN 43531 C             |
|                                                                                                                                                                                                   | 6.4   | Battery voltage/nominal capacity                             | V / Ah | 48 / 620                |
|                                                                                                                                                                                                   | 6.5   | Battery weight                                               | kg     | 939                     |
|                                                                                                                                                                                                   | 6.6.1 | Energy consumption according to EN cycle (Efficiency   PLUS) | kWh/h  | 2.93   3.75             |
|                                                                                                                                                                                                   | 6.6.2 | CO2 equivalent according to EN ISO 23308 (Efficiency   PLUS) | kg/h0  | 1.58   2.1              |
|                                                                                                                                                                                                   | 6.7   | Throughput (Efficiency   PLUS)                               | t/h    | 78   80                 |
|                                                                                                                                                                                                   | 6.8.1 | Energy consumption with max. throughput (Efficiency   PLUS)  | kWh/h  | 3.09   4.14             |
| Other                                                                                                                                                                                             | 8.1   | Type of drive control                                        |        | Mosfet/AC               |
|                                                                                                                                                                                                   | 10.1  | Operating pressure for attachment                            | bar    | 230                     |
|                                                                                                                                                                                                   | 10.2  | Oil flow for attachments                                     | l/min  | 20                      |
|                                                                                                                                                                                                   | 10.7  | Sound pressure level according to EN12053                    | dB (A) | 70                      |
| - 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. |       |                                                              |        |                         |

- VDI no. 1.5: ETV MC 320 with lift height h3 > 11.5m, the rated load capacity is 1800kg
- VDI no. 1.8: battery size and mast type affect load distance x
- VDI no. 2.1.1: battery size and mast version affect service weight and axle loads
- VDI no. 2.3: battery size and mast version affect service weight and axle loads
- VDI no. 2.4: battery size and mast version affect service weight and axle loads
- VDI no. 2.5: battery size and mast version affect service weight and axle loads
- VDI no. 4.1: the mast version determines the tilt values
- VDI no. 4.10: the height of the support arms is enlarged by 42 mm with a load support arm cover
- VDI no. 4.19: battery size, mast type and fork length affect the overall length l1
- VDI no. 4.19: total length increased by 20mm with floor stripes option
- VDI no. 4.20: battery size and mast type affect the length including fork shank l2
- VDI no. 4.28: battery size and mast type affect the reach distance l4
- VDI no. 4.34.1: battery size and mast type affect the aisle widths
- VDI no. 4.34.1: AST increased by 20mm with floor stripes option
- VDI no. 4.34.2: battery size and mast type affect the aisle widths
- VDI no. 4.34.2: AST increased by 20mm with floor stripes option
- VDI no. 4.7: height of overhead guard increased by 108mm with floor stripes option
- VDI no. 6.6.1: PLUS refers to the drive&liftPLUS performance package
- VDI no. 6.6.2: PLUS refers to the drive&liftPLUS performance package
- 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**