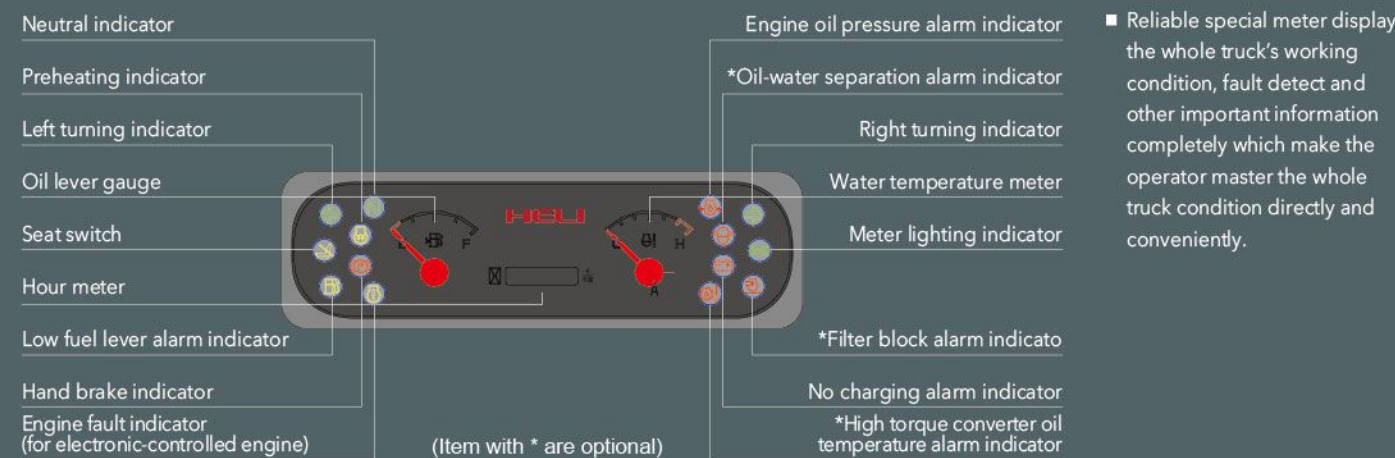


Reliable special designed instrument



Standard configuration

- Horn
- Control valve
- Wholly hydraulic-powered steering
- Half enclosed seat
- Backrest
- Back view mirror
- Front combined lamp
- Transmission oil filter
- Engine flame out device
- Cable type parking brake
- Driver's tool
- Rear combined lamp
- Backward buzzer
- Tilt oil circuit self lock valve
- Tilt adjustable steering column
- Overhead guard rain cover

Optional

- Standard fork
- Integrated electric box
- Hydraulic oil circuit filter
- Flow regulator
- Wide view mast
- Air intaking device
- Durable tread tyre
- Lifting and tilting operation lever
- Traction pin
- Head lamp
- Hydraulic oil dipstick
- Overhead guard
- Torque converter oil dipstick
- Combined instrument
- Electro-hydraulic direction changing
- Driver's cab
- Warning light
- High air exhausting device
- Double air cleaner
- Suspension seat
- Lengthening fork extension
- Warm air blower
- Solid tyre
- Widen fork arm carrier
- Wind shield
- Cleansing muffler
- Fire extinguisher muffler
- Fire extinguisher
- Rear working light
- Air conditioner (certain type)
- Travelling control system
- Torque converter oil temperature meter
- Tilting cylinder bush
- Customer made color
- Optional attachments
- Steel protection net
- Double-tyre and protection device
- Rotating seat for LPG
- Single/dual fuel system
- Low speed alarm



2-3.5t H3 series Internal Combustion Counterbalanced Forklift Truck



2-3.5t H3 series Internal Combustion Counterbalanced Forklift Truck

Improved performance, superior quality



Vibration 20% reduced

Noise 3dB reduced

- Cushion connection and wholly suspension driver's cab absorb whole truck's vibration effectively.
- Noise around ear is reduced through down the tilting cylinder under the floor board and using fully closed patch type driver's cab.
- Lower damping device inside the lifting system reduces mast shock and vibration, avoiding crash noise caused by goods falling to the ground.

Workspace 45% increased

- Space around foot is effectively increased through up steering unit and using suspension type inching.
- The operation space is enlarged by heightened overhead guard and using large arc shape of the overhead guard's front leg
- Semi-suspension seat, steering wheel with small diameter, electro-hydraulic direction changing and automobile type double joystick combined switch effectively improve driving comfort.

Operator's view 20% improved

- Operator's front view is improved through the assembling of stand wide view mast and lowering the dashboard.
- Operator's rear view improved through the CAE optimal designed counterweight.



Working efficiency 20% improved

- Small turning radius makes steering flexible and easy.
- The truck has fast lifting speed, good gradeability and high efficiency.
- High working efficiency guarantees the truck could meet the requirements for various kinds of complicated work condition perfectly wherever at port, dock and railway station.

Loading capacity increased over 5%

Stability 5% improved

Reliability 40% improved

- The hot air reflow isolating device, optimal thermal dissipation duct and aluminum plate-fin type radiator improve cooling ability and ensure engine work reliability.
- Automobile type oil filling cap and optimal oil filling channel structure and process ensure whole truck's safety.
- The constant displacement pump load sensing steering system increases the lifting speed and reduces the hydraulic oil temperature.
- The optimal design of key parts like frame, mast, overhead guard and steering axle improve the whole truck's safety and reliability.
- The repositioning of whole truck's gravity center improve loading capacity, stability and safety.

Engine hood open angle increased to 80°

- Enlarged internal space is convenient for engine and transmission box maintenance.
- Increased hood open angle contributes to quick and convenient maintenance.

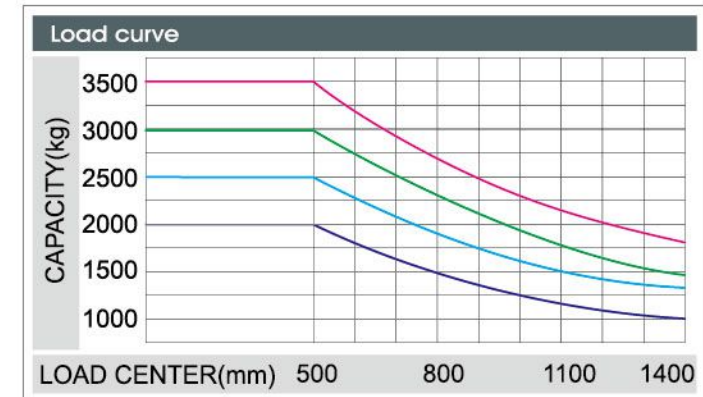
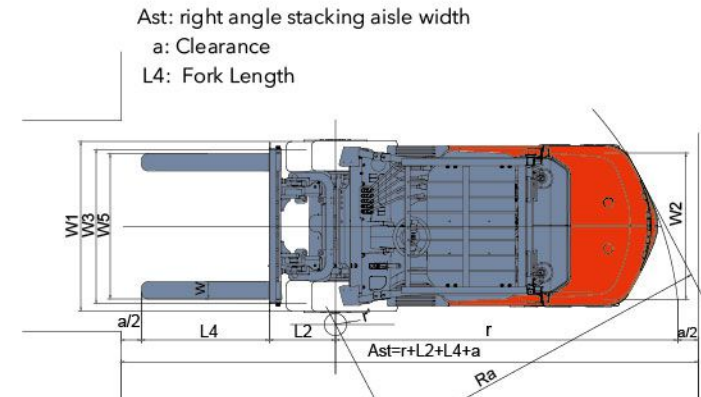
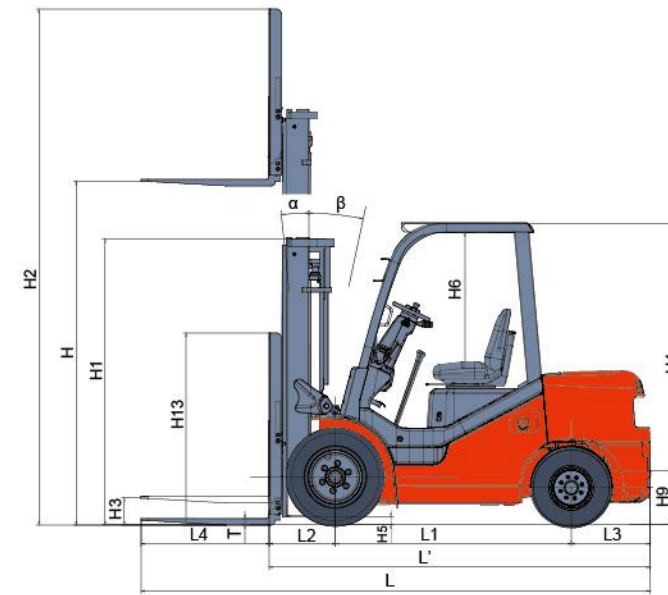


2-3.5t H3 series Internal Combustion Counterbalanced Forklift Truck



Manufacturer and technical parameters

| Character | | HELI | | | | | |
|---------------------|--|--|--|--|--|-------------|-------------|
| 1.01 | Manufacturer | HELI | | | | | |
| 1.02 | Model | CPC20 / CPCD20 / CPQ(Y)D20 / CPQ(Y)D20 | CPC25 / CPCD25 / CPQ(Y)D25 / CPQ(Y)D25 | CPC30 / CPCD30 / CPQ(Y)D30 / CPQ(Y)D30 | CPC35 / CPCD35 / CPQ(Y)D35 / CPQ(Y)D35 | | |
| 1.03 | Rated capacity | kg | 2000 | 2500 | 3000 | 3500 | |
| 1.04 | Load center | mm | 500 | | | | |
| 1.05 Operation mode | | Seat-type | | | | | |
| Size | | | | | | | |
| 2.01 | Max.lifting height | H | mm | 3000 | 3000 | 3000 | 3000 |
| 2.02 | Mast overall height(Fork to the ground and mast be vertical) | H1 | mm | 2000 | 2000 | 2065 | 2180 |
| 2.03 | Max.fork lifting height(With backrest) | H2 | mm | 4030 | 4030 | 4245 | 4235 |
| 2.04 | Free lift height | H3 | mm | 165 | 165 | 160 | 170 |
| 2.05 | Overall height(Overhead guard) | H4 | mm | 2150 | 2150 | 2170 | 2170 |
| 2.06 | Min.ground clearance(At the mast) | H5 | mm | 115 | 115 | 135 | 135 |
| 2.07 | Distance from the surface of the seat to the overhead guard | H6 | mm | 1030 | 1030 | 1030 | 1030 |
| 2.08 | Traction pin height | H9 | mm | 275 | 275 | 280 | 280 |
| 2.09 | Backrest height(Calculated from the surface of the fork) | H13 | mm | 1000 | 1000 | 1227 | 1222 |
| 2.10 | Overall length(With fork/Without fork) | (L/L') | mm | 3500/2580 | 3708/2638 | 3818/2748 | 3836/2766 |
| 2.11 | Wheel base | L1 | mm | 1650 | 1650 | 1700 | 1700 |
| 2.12 | Front overhang | L2 | mm | 473 | 473 | 478 | 496 |
| 2.13 | Rear overhang | L3 | mm | 457 | 515 | 570 | 570 |
| 2.14 | Overall width | W1 | mm | 1150 | 1150 | 1225 | 1225 |
| 2.15 | Tread (Front tread/Rear tread) | (W3/W2) | mm | 970/970 | 970/970 | 1000/970 | 1000/970 |
| 2.16 | Fork adjustable range(the external of the fork)(Max./Min.) | W5 | mm | 1030/244 | 1030/244 | 1060/250 | 1060/250 |
| 2.17 | Min.turning radius(Exterior) | r | mm | 2170 | 2240 | 2400 | 2420 |
| 2.18 | Min.turning radius(Interior) | r' | mm | 180 | 180 | 200 | 200 |
| 2.19 | Min.right angle stacking aisle width | Ra | mm | 2200 | 2280 | 2380 | 2400 |
| 2.20 | Mast tilting angle | α / β | % | 6°/12° | 6°/12° | 6°/12° | 6°/12° |
| 2.21 | Fork size | L4×W×T | mm | 920×122×40 | 1070×122×40 | 1070×125×45 | 1070×125×50 |
| Weight | | | | | | | |
| 3.01 | Total weight | kg | 3420 | 3800 | 4370 | 4800 | |
| 3.02 | Weight distribution loaded (Front/Rear) | kg | 4770/650 | 5480/820 | 6460/910 | 7470/830 | |
| 3.03 | Weight distribution unloaded (Front/Rear) | kg | 1600/1820 | 1560/2240 | 1710/2660 | 1880/2920 | |
| Wheel and tyre | | | | | | | |
| 4.01 | Wheel number x = drive wheel (Front/Rear) | 2X/2 | | | | | |
| 4.02 | Tyre type(Front/Rear) | Pneumatic tyre | | | | | |
| 4.03 | Tyre size(Front/Rear) | 7.00-12-12PR/ 6.00-9-10PR | 7.00-12-12PR/ 6.00-9-10PR | 28×9-15-12PR/ 6.50-10-10PR | 28×9-15-14PR/ 6.50-10-10PR | | |
| 4.04 | Service brake | Hydraulic-Foot Pedal | | | | | |
| 4.05 | Parking brake | Mechanical-Hand Lever | | | | | |



Legend for Load Curve:
 CPQ(Y)D20 (Blue), CPQ(Y)D25 (Light Blue), CPC20 (Dark Blue), CPCD20 (Light Blue)
 CPQ(Y)D25 (Light Blue), CPC25 (Dark Blue), CPCD25 (Light Blue)
 CPQ(Y)D30 (Green), CPC30 (Dark Green), CPCD30 (Light Green)
 CPQ(Y)D35 (Pink), CPC35 (Dark Pink), CPCD35 (Light Pink)

Note: The vertical axis stands for load capacity and the horizontal axis stands for load center which is calculated from the front of the fork. The base point of the standard load refers to the center position of the cube with 1000mm length of side. When mast is tilted forward, nonstandard fork usage or load with over wide goods, load capacity will be reduced. Different load capacity in different load center can be known in time through load chart.

WIDE VIEW MAST

| Mast model | Max. lifting height mm | Load capacity (load center 500mm) | | | | Mast overall height (fork to the ground) | | | Service weight | | | | Mast tilting angle (°) α/β |
|------------|------------------------|-----------------------------------|----------------------------|----------------------------|----------------------------|--|------|------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| | | CPQ(Y)D20 / CPC20 / CPCD20 | CPQ(Y)D25 / CPC25 / CPCD25 | CPQ(Y)D30 / CPC30 / CPCD30 | CPQ(Y)D35 / CPC35 / CPCD35 | 2-2.5t | 3t | 3.5t | CPQ(Y)D20 / CPC20 / CPCD20 | CPQ(Y)D25 / CPC25 / CPCD25 | CPQ(Y)D30 / CPC30 / CPCD30 | CPQ(Y)D35 / CPC35 / CPCD35 | |
| M200 | 2000 | 2000 | 2500 | 3000 | 3500 | 1495 | 1570 | 1680 | 3340 | 3720 | 4280 | 4700 | 6/12 |
| M250 | 2500 | 2000 | 2500 | 3000 | 3500 | 1745 | 1820 | 1930 | 3385 | 3765 | 4335 | 4750 | 6/12 |
| M300 | 3000 | 2000 | 2500 | 3000 | 3500 | 1995 | 2080 | 2180 | 3420 | 3800 | 4370 | 4800 | 6/12 |
| M330 | 3300 | 2000 | 2500 | 3000 | 3500 | 2145 | 2220 | 2330 | 3460 | 3840 | 4395 | 4830 | 6/12 |
| M350 | 3500 | 2000 | 2500 | 3000 | 3500 | 2245 | 2320 | 2430 | 3480 | 3860 | 4420 | 4850 | 6/12 |
| M370 | 3700 | 2000 | 2500 | 3000 | 3500 | 2345 | 2420 | 2530 | 3500 | 3880 | 4430 | 4870 | 6/12 |
| M400 | 4000 | 2000 | 2500 | 3000 | 3500 | 2545 | 2620 | 2730 | 3565 | 3945 | 4490 | 4940 | 6/12 |
| M425 | 4250 | 1900 | 2250 | 2850 | 3100 | 2670 | 2745 | 2855 | 3590 | 3970 | 4510 | 4970 | 6/12 |
| M450 | 4500 | 1800 | 2150 | 2750 | 3000 | 2795 | 2870 | 2980 | 3615 | 3995 | 4535 | 4990 | 6/12 |
| M500 | 5000 | 1700 | 2050 | 2650 | 2850 | 3045 | 3120 | 3230 | 3655 | 4035 | 4575 | 5040 | 6/12 |
| M550 | 5500 | 1600 | 1950 | 2550 | 2850 | 3345 | 3420 | 3530 | 3740 | 4120 | 4745 | 5245 | 3/6 |
| M600 | 6000 | 1500 | 1800 | 2200 | 2300 | 3595 | 3670 | 3780 | 3785 | 4165 | 4795 | 5285 | 3/6 |

Note: (1) *stands for the rated capacity when the front tyre is double-tyre. (2) When the front tyre of the 2-3.5t truck is double tyre, the service weight of the truck is the weight in the table plus 110kg.

Performance

| Model | CPC20 | CPCD20 | CPC25 | CPCD25 | CPC30 | CPCD30 | CPC35 | CPCD35 | CPQ(Y)D20 | CPQ(Y)D25 | CPQ(Y)D25 | CPQ(Y)D25 | CPQ(Y)D30 | CPQ(Y)D30 | CPQ(Y)D35 | CPQ(Y)D35 | |
|---|---|------------|-------|--------|-------|--------|-------|--------|-----------|------------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| Max.drawbar pull (Loaded/Unloaded) | kN | | | | | | | | | | | | | | | | |
| *Max.Gradeability (Loaded/Unloaded)* | % | | | | | | | | | | | | | | | | |
| Max.traveling speed (Loaded/Unloaded) | km/h | | | | | | | | | | | | | | | | |
| Lifting Speed (Loaded/Unloaded) | mm/s | | | | | | | | | | | | | | | | |
| Lowing Speed (Loaded/Unloaded) | mm/s | | | | | | | | | | | | | | | | |
| Drive and transmission control device | | ISUZU C240 | | | | | | | | ISUZU 4JG2 | | | | | | | |
| Engine mode | GCT K25 | | | | | | | | | | | | | | | | |
| Engine rated power | kW/rpm | | | | | | | | | | | | | | | | |
| Engine rated torque | Nm/rpm | | | | | | | | | | | | | | | | |
| Engine cylinder number-borexstroke | L | | | | | | | | | | | | | | | | |
| Engine displacement | L | | | | | | | | | | | | | | | | |
| Engine type | Diesel | | | | | | | | | | | | | | | | |
| Emission | Euro Stage IIIA | | | | | | | | | | | | | | | | |
| Battery(Voltage/Capacity) | V/Ah | | | | | | | | | | | | | | | | |
| Engine fuel tank capacity | L | | | | | | | | | | | | | | | | |
| Transmission box shifting gears (Front/Rear type) | 1-1Power Shift T/M / 2-2 Manual Shift T/M | | | | | | | | | | | | | | | | |

Note:*stands for theoretical calculating value.

Engine Model and Main Specification for Option

| Engine model | Rated power/ rotating speed (Kw/rpm) | Rated power/ rotating speed (Nm/rpm) | Engine displacement (L) | Engine cylinder number | Cylinder number - BorexStroke | Engine type | Emission |
|-----------------|--------------------------------------|--------------------------------------|-------------------------|------------------------|-------------------------------|-----------------|------------------------|
| ISUZU 4JG2 | 35/2450 | 170/1700 | 3.05 | 4 | 4-95.4x107 | Diesel | Euro Stage IIIA |
| KUBOTA V2403 | 34.1/2400 | 155.9/1600 | 2.434 | 4 | 4-87×102.4 | Diesel | Euro Tier IIIA/EPA T4I |
| Cummins QSF2.8 | 36/2500 | 186/1100-1500 | 2.8 | 4 | 4-94x100 | Diesel | Euro Tier IIIA |
| Cummins QSF2.8 | 43/2500 | 186/1100-1500 | 2.8 | 4 | 4-94x100 | Diesel | Euro Tier IIIA |
| DACHAI CA498 | 45/2500 | 196/1800 | 3.168 | 4 | 4-98x105 | Diesel | - |
| JMC HJ493 | 39/2500 | 165/1800 | 2.771 | 4 | 4-93x102 | Diesel | - |
| JMC HJ493G43 | 36.5/2500 | 156/1800 | 2.771 | 4 | 4-93x102 | Diesel | Euro Tier IIIA |
| GCT K21 | 31.2/2200 | 143.7/1600 | 2.065 | 4 | 4-89x83 | Gasoline or LPG | - |
| Mitsubishi 4G64 | GAS:48/2700 LPG:46/2700 | GAS:170/2400 LPG:168/1600 | 2.351 | 4 | 4-86.5×100 | Gasoline or LPG | - |

WIDE VIEW FULL FREE 2-STAGE MAST

| Mast model | Max. lifting height mm | Load capacity (load center 500mm) | | | | Mast overall height (fork to the ground) | | | Free lifting height (with backrest) | | | Service weight | | | | Mast tilting angle (°) α/β |
|------------|------------------------|-----------------------------------|----------------------------|----------------------------|----------------------------|--|------|------|-------------------------------------|------|------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| | | CPQ(Y)D20 / CPC20 / CPCD20 | CPQ(Y)D25 / CPC25 / CPCD25 | CPQ(Y)D30 / CPC30 / CPCD30 | CPQ(Y)D35 / CPC35 / CPCD35 | 2-2.5t | 3t | 3.5t | 2-2.5t | 3t | 3.5t | CPQ(Y)D20 / CPC20 / CPCD20 | CPQ(Y)D25 / CPC25 / CPCD25 | CPQ(Y)D30 / CPC30 / CPCD30 | CPQ(Y)D35 / CPC35 / CPCD35 | |
| ZM200 | 2000 | 2000 | 2500 | 3000 | 3500 | 1495 | 1570 | 1680 | 495 | 340 | 460 | 3470 | 3850 | 4330 | 4770 | 6/12 |
| ZM250 | 2500 | 2000 | 2500 | 3000 | 3500 | 1745 | 1820 | 1930 | 745 | 590 | 710 | 3515 | 3895 | 4370 | 4820 | 6/12 |
| ZM300 | 3000 | 2000 | 2500 | 3000 | 3500 | 1995 | 2080 | 2180 | 995 | 840 | 960 | 3550 | 3945 | 4420 | 4870 | 6/12 |
| ZM330 | 3300 | 2000 | 2500 | 3000 | 3500 | 2145 | 2220 | 2330 | 1145 | 990 | 1110 | 3595 | 3975 | 4445 | 4895 | 6/12 |
| ZM350 | 3500 | 2000 | 2500 | 3000 | 3500 | 2245 | 2320 | 2430 | 1245 | 1090 | 1210 | 3615 | 3995 | 4465 | 4915 | 6/12 |
| ZM370 | 3700 | 2000 | 2500 | 3000 | 3500 | 2345 | 2420 | 2530 | 1345 | 1200 | 1310 | 3635 | 4015 | 4480 | 4935 | 6/12 |
| ZM400 | 4000 | 2000 | 2500 | 3000 | 3500 | 2545 | 2620 | 2730 | 1545 | 1390 | 1510 | 3705 | 4085 | 4550 | 5000 | 6/12 |
| ZM425 | 4250 | 1900 | 2250 | 2850 | 3100 | 2670 | 2745 | 2855 | 1670 | 1515 | 1635 | 3730 | 4110 | 4575 | 5025 | 6/12 |
| ZM450 | 4500 | 1800 | 2150 | 2750 | 3000 | 2795 | 2870 | 2980 | 1795 | 1640 | 1760 | 3755 | 4135 | 4595 | 5050 | 6/12 |
| ZM500 | 5000 | 1700 | 2050 | 2650 | 2850 | 3045 | 3120 | 3230 | 2045 | 1890 | 2010 | 3805 | 4185 | 4640 | 5100 | 6/12 |
| ZM550 | 5500 | 1600 | 1950 | 2550 | 2850 | 3345 | 3420 | 3530 | 2345 | 2190 | 2310 | 3890 | 4270 | 4830 | 5295 | 3/6 |
| ZM600 | 6000 | 1500 | 1800 | 2200 | 2300 | 3595 | 3670 | 3780 | 2595 | 2440 | 2560 | 3935 | 4315 | 4875 | 5350 | 3/6 |

Note: (1) *stands for the rated capacity when the front tyre is double-tyre. (2) When the front tyre of the 2-3.5t truck is double tyre, the service weight of the truck is the weight in the table plus 110kg. (3) The free lifting height (without backrest) of the 2-2.5t truck is the height (with backrest) in the table plus 432mm. The free lifting height (without backrest) of the 3t truck is the height (with backrest) in the table plus 368mm. The free lifting height (without backrest) of the 3.5t truck is the height (with backrest) in the table plus 505mm.

WIDE VIEW FULL FREE 3-STAGE MAST

| Mast model | Max. lifting height mm | Load capacity (load center 500mm) | | | | Mast overall height (fork to the ground) | | | Free lifting height (with backrest) | | | Service weight | | | | Mast tilting angle (°) α/β |
|------------|------------------------|-----------------------------------|----------------------------|----------------------------|----------------------------|--|------|------|-------------------------------------|------|------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| | | CPQ(Y)D20 / CPC20 / CPCD20 | CPQ(Y)D25 / CPC25 / CPCD25 | CPQ(Y)D30 / CPC30 / CPCD30 | CPQ(Y)D35 / CPC35 / CPCD35 | 2-2.5t | 3t | 3.5t | 2-2.5t | 3t | 3.5t | CPQ(Y)D20 / CPC20 / CPCD20 | CPQ(Y)D25 / CPC25 / CPCD25 | CPQ(Y)D30 / CPC30 / CPCD30 | CPQ(Y)D35 / CPC35 / CPCD35 | |
| ZSM360 | 3600 | 2000 | 2400 | 2900 | 3200 | 1795 | 1930 | 1930 | 795 | 705 | 710 | 3715 | 4095 | 4610 | 4925 | 6/6 |
| ZSM400 | 4000 | 1900 | 2400 | 2900 | 3200 | 1920 | 2055 | 2055 | 920 | 830 | 835 | 3745 | 4125 | 4640 | 4955 | 6/6 |
| ZSM435 | 4350 | 1850 | 2300 | 2800 | 3100 | 2045 | 2180 | 2180 | 1045 | 955 | 960 | 3775 | 4155 | 4665 | 4980 | 6/6 |
| ZSM450 | 4500 | 1750 | 2150 | 2700 | 2800 | 2095 | 2230 | 2230 | 1095 | 1005 | 1010 | 3785 | 4165 | 4680 | 4995 | 6/6 |
| ZSM470 | 4700 | 1700 | 2100 | 2600 | 2900 | 2160 | 2230 | 2230 | 1160 | 1005 | 1010 | 3800 | 4180 | 4700 | 5015 | 6/6 |
| ZSM480 | 4800 | 1800 | 2300 | 2800 | 2900 | 2195 | 2330 | 2330 | 1195 | 1105 | 1110 | 3805 | 4185 | 4720 | 5025 | 6/6 |
| ZSM500 | 5000 | 1700 | 2150 | 2700 | 2800 | 2295 | 2430 | 2430 | 1295 | 1205 | 1210 | 3830 | 4210 | 4745 | 5060 | 6/6 |
| ZSM540 | 5400 | 1650 | 2050 | 2600 | 2700 | | | | | | | | | | | |