

Features

Linde hydrostatic drive system

- Responsive, smooth, precise
- No mechanical wear components
- Robust, well proven in severe applications
- Low maintenance cost
- Long service life



Linde clear-view mast

- Superior visibility
- Full capacity to 256" / 268"
- Unmatched residual capacity with attachments

Linde twin pedal travel control

- Instantaneous directional changes
- Precise control without shift shock
- Lower fatigue, improved productivity

Linde Load Control (LLC)

- Effortless load handling with fingertip control
- Precision placement and transfer of loads
- Complete separation of travel and hydraulic functions

Linde truck control

- Automatic engine speed control
- Redundant monitoring systems
- Fully sealed electronic controller



Linde operator compartment

- Unmatched visibility
- Advanced ergonomic design
- Spacious
- Floating, shock mounted cab

Power plant

- Industrial Deutz Diesel engine
- High torque, 348 lbf at 1600 rpm
- Electronic engine management
- Low emissions, exceeding Tier 3 requirements
- Fuel tank 21.0 gallons

Linde torsion distribution system

- Reduction of mast distortion up to 30%
- High residual capacity
- Overhead tilt cylinders

ANSI standard truck meets all applicable mandatory requirements of ANSI/ISO B56.1 standards for powered industrial trucks. NOTE: Performance data may vary due to motor and system efficiency tolerances. The performance depicted represents nominal values obtained under typical operating conditions. Metric dimensions are in millimeters unless otherwise specified. All metric dimensions are not direct equivalents due to rounding data. The descriptions and specifications included on this data sheet were in effect at the time of printing. Linde Material Handling North America Corporation reserves the right to make improvements and changes in specification or design without notice and without incurring obligation. Please check with your authorized Linde dealer for information on possible updates or revisions.



Diesel Forklift Trucks
13,000 to 17,500 lbs. Capacity
 H60D, H70D, H80D, H80D-900, and H80D-1100
 SERIES 396

Linde Material Handling



Safety

With full loads weighing as much as 17500 lbs. at 43" load center and full capacity up to 256" of lift height—safety is priority number one. The Linde Torsion Support System and mast design are the fundamental reasons for stability when handling wide, swinging loads generating high dynamic forces.

Performance

These trucks are engineered to take care of the really tough jobs. Advanced engine design and Linde hydrostatic drive technology enable the operator to accelerate and decelerate smoothly and without shift-shock, at slow pace or at full speed. Without effort, using the original Linde Load Control, the driver manipulates the load efficiently and quickly in any condition. Precise control of all movements is the key to high performance.

Comfort

Man and machine are perfectly matched on these high capacity forklifts. Designed to the most advanced ergonomic standards, the generously sized driver's cab provides a comfortable work environment. Fully adjustable seat and armrest contribute to minimizing stress and fatigue. Fingertip hydraulic controls, designed into the armrest, add further to the fatigue free operation.

Reliability & Durability

50 years of experience with hydrostatic drive systems are combined with a robust, industrial diesel engine, the result, utmost reliability. This combination has consistently proven dependable in even the most challenging environments. This machine is effective and cost efficient without equal.

Economic

The original Linde hydrostatic system operates without mechanical transmission, torque converter, clutch, differential axle and conventional brakes. The net effect: low operating cost and increased productivity, a significant advantage especially in high cycle applications.

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Standard and optional equipment

Standard equipment:

Direct injection, turbo charged, 4.0 liter (244 cubic inches) diesel engine with intercooler, providing 116 hp
 Twin pedal drive system
 SE tires
 Armrest with Linde Load Control
 Hydraulic suspension, high comfort driver seat
 Tilttable steering wheel
 Hydrostatic power steering
 Torsion distribution system
 High performance filter system
 Comprehensive display

Options:

Single pedal travel control
 Tire options, Radial, twin, etc..
 Special carriages
 Integrated sidershifters and fork positioners
 Complete cabs
 Heating and cooling
 Seat options
 Lighting options
 Various custom options and packages

Other options available on request

Capacity and Mast Information*

| h1 (in.) | h3 (in.) | Type | Capacity (lb.) | Tilt (°F/°B) |
|--------------------------------------------------------------------------------------------------------------------------------------|----------|---------|----------------|--------------|
| H60D Capacity (lb) @ 24" load center** • 2.5" x 6" x 48" Std taper Class IV forks** • Single SE 355/65 - 15 drive tires** | | | | |
| 107.5 | 140.0 | Simplex | 13000 | 5/9 |
| 119.5 | 163.5 | Simplex | 13000 | 5/9 |
| 127.5 | 179.5 | Simplex | 13000 | 5/9 |
| 141.0 | 207.0 | Simplex | 13000 | 5/9 |
| 157.0 | 238.5 | Simplex | 13000 | 5/9 |
| H70D Capacity (lb) @ 24" load center** • 2.75" x 8" x 48" Std taper Class IV forks** • Dual SE 8.25 - 15 drive tires** | | | | |
| 107.5 | 124.0 | Simplex | 15000 | 5/9 |
| 119.5 | 148.0 | Simplex | 15000 | 5/9 |
| 127.5 | 163.5 | Simplex | 15000 | 5/9 |
| 141.0 | 191.0 | Simplex | 15000 | 5/9 |
| 157.0 | 222.5 | Simplex | 15000 | 5/9 |
| H80D Capacity (lb) @ 24" load center** • 2.75" x 6" x 48" Std taper Class IV forks** • Dual SE 8.25 - 15 drive tires** | | | | |
| 107.5 | 124.0 | Simplex | 17500 | 5/9 |
| 119.5 | 148.0 | Simplex | 17500 | 5/9 |
| 127.5 | 163.5 | Simplex | 17500 | 5/9 |
| 141.0 | 191.0 | Simplex | 17500 | 5/9 |
| 157.0 | 222.5 | Simplex | 17500 | 5/9 |
| H80D-900 Capacity (lb) @ 36" load center** • 2.75" x 8" x 72" Std taper Class IV forks** • Dual SE 8.25 - 15 drive tires** | | | | |
| 107.5 | 108.5 | Simplex | 17500 | 5/9 |
| 119.5 | 132.0 | Simplex | 17500 | 5/9 |
| 127.5 | 148.0 | Simplex | 17500 | 5/9 |
| 141.0 | 175.5 | Simplex | 17500 | 5/9 |
| H80D-1100 Capacity (lb) @ 43" load center** • 2.75" x 8" x 84" Std taper Class IV forks** • Dual SE 315/70 - 15 drive tires** | | | | |
| 107.5 | 108.5 | Simplex | 17500 | 5/9 |
| 119.5 | 132.0 | Simplex | 17500 | 5/9 |
| 127.5 | 148.0 | Simplex | 17500 | 5/9 |
| 141.0 | 175.5 | Simplex | 17500 | 5/9 |

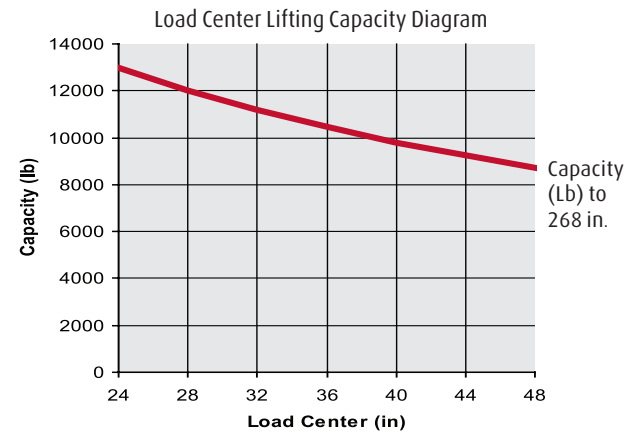
* For quick reference only, contact factory for detailed ratings.

** Capacity ratings can be affected by changing forks, load center, and/or tires.

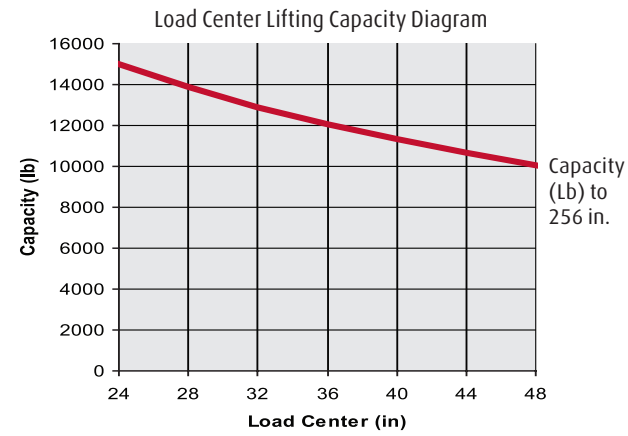
Downrating Charts*

Reference SE tires, standard carriage
Class IV forklifts

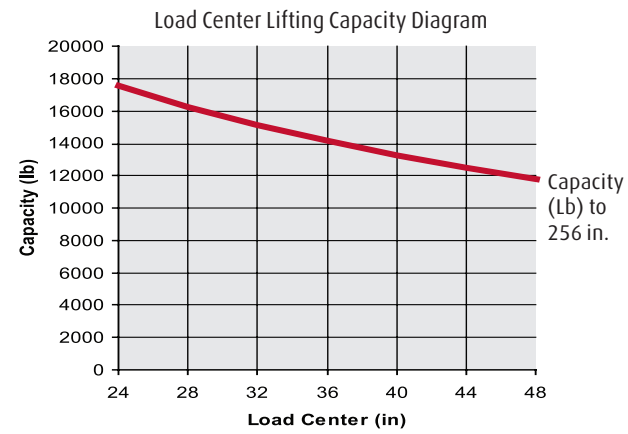
H60D (396)



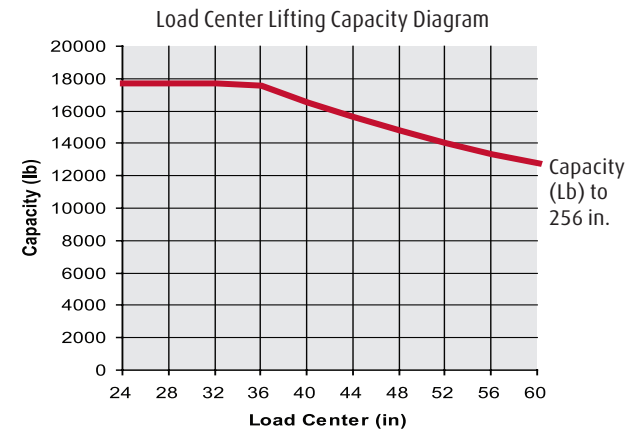
H70D (396)



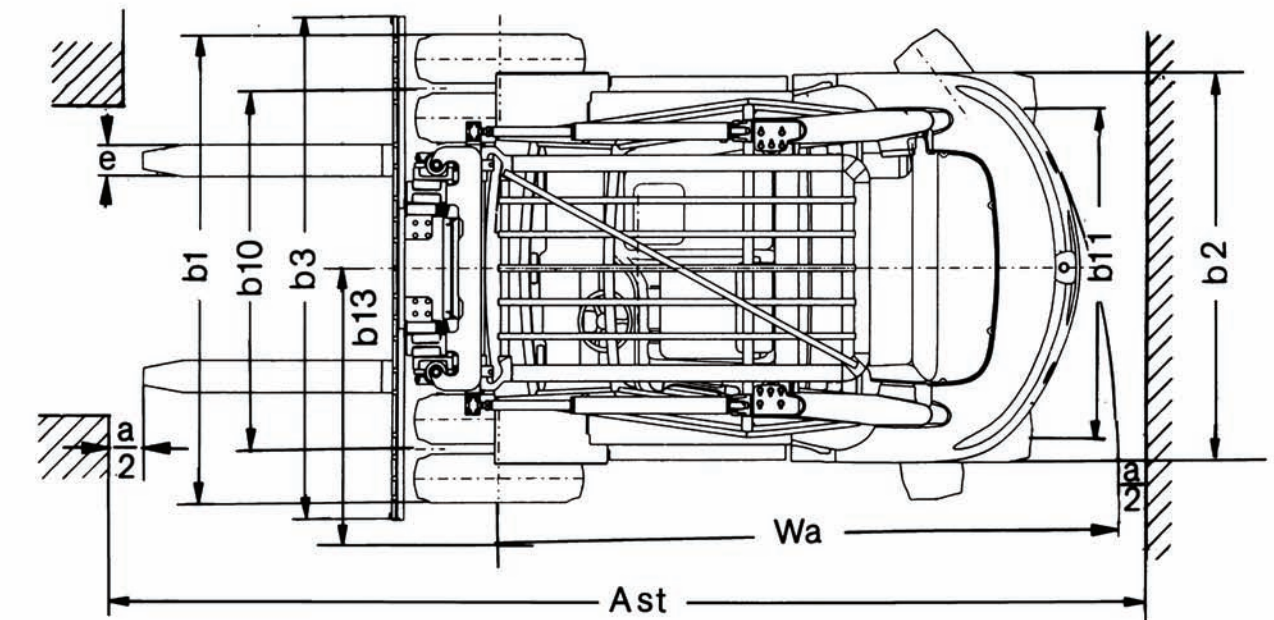
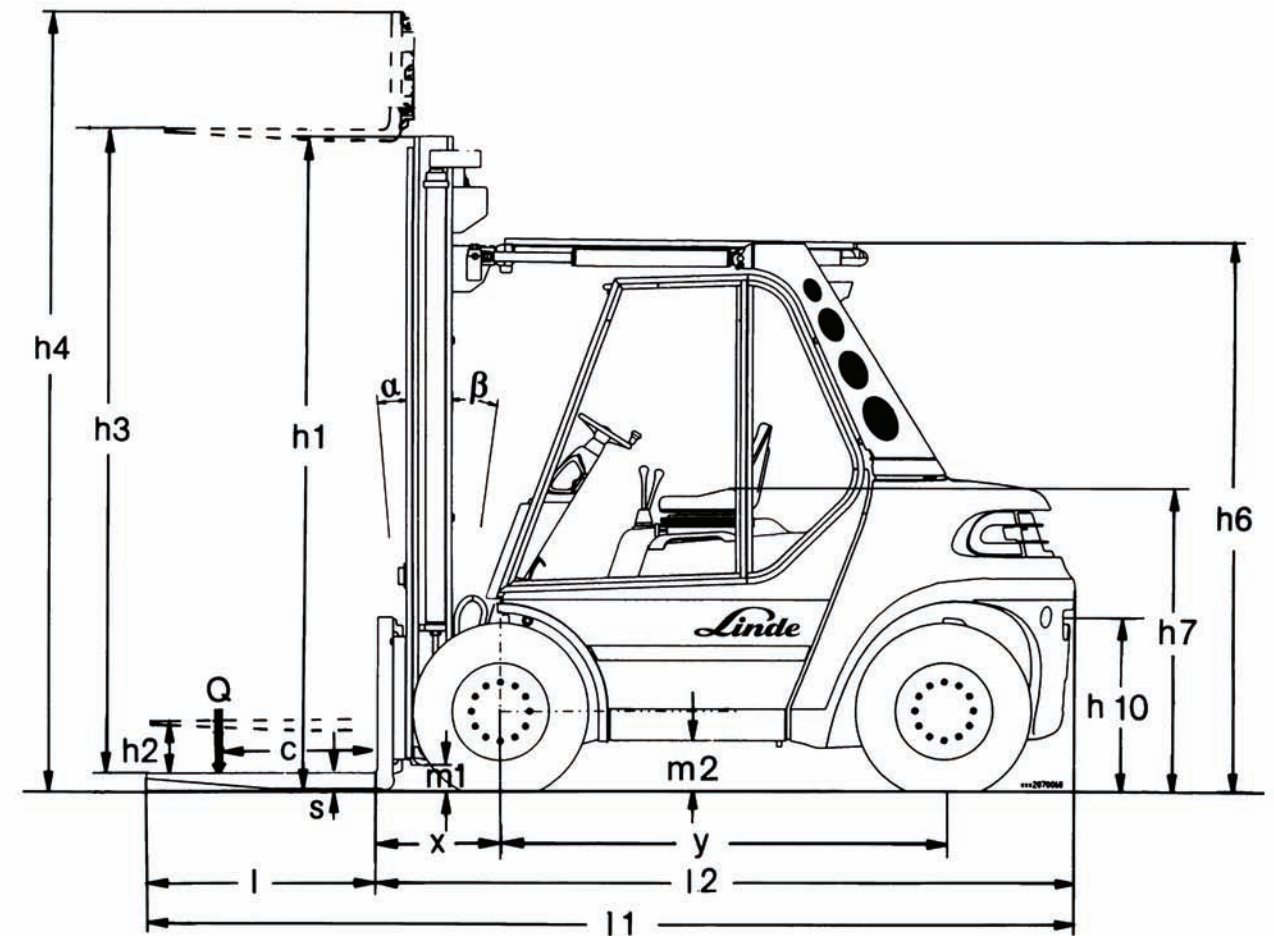
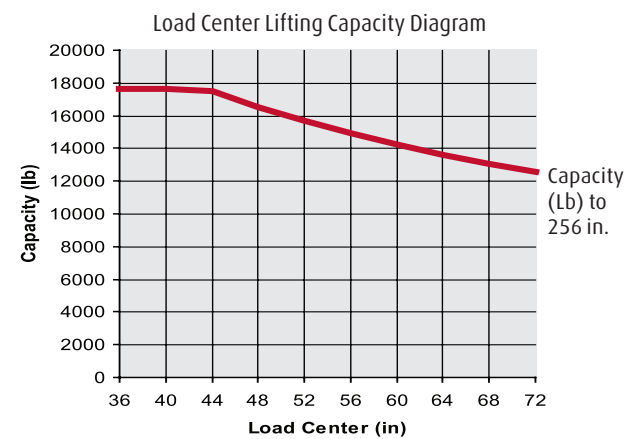
H80D (396)



H80D-900 (396)



H80D-1100 (396)



Technical data

May 2010 / SERIES 396

| | | | | | | | | | | | | | | |
|-----------------|-----------------------------|--------------------------------------------------------------------------------|-----------------------------------------------------------|---------------------------|---------|-------------------------|---------|-------------------------|---------|-------------------------|---------|---------------------------|---------|------|
| Characteristics | 1.1 | Manufacturer | | Linde | | Linde | | Linde | | Linde | | Linde | | 1.1 |
| | 1.2 | Model designation | | H60D | | H70D | | H80D | | H80D-900 | | H80D-1100 | | 1.2 |
| | 1.3 | Power unit: battery, diesel, gasoline, LP gas | | Diesel | | Diesel | | Diesel | | Diesel | | Diesel | | 1.3 |
| | 1.4 | Operation: manual, pedestrian, rider standing, rider seated, order picker | | Seated | | Seated | | Seated | | Seated | | Seated | | 1.4 |
| | 1.5 | Load capacity | Q lb | 13000 | | 15000 | | 17500 | | 17500 | | 17500 | | 1.5 |
| | 1.6 | Load center | c in | 24 | | 24 | | 24 | | 36 | | 43 | | 1.6 |
| | 1.8 | Load distance (axle center to fork face) | x in | 24.8 | | 25.2 | | 25.2 | | 26.4 | | 26.4 | | 1.8 |
| | 1.9 | Wheelbase | y in | 85 | | 85 | | 85 | | 98.8 | | 110.6 | | 1.9 |
| | Weight | 2.1 | Service weight | lb | 22928 | | 25838 | | 27602 | | 31019 | | 32893 | |
| 2.2 | | Axle loading with load, front/rear | lb | 31386 / 4494 | | 35381 / 5403 | | 39353 / 5691 | | 43425 / 5029 | | 45174 / 5150 | | 2.2 |
| 2.3 | | Axle loading without load, front/rear | lb | 10891 / 12037 | | 11563 / 14275 | | 11772 / 15830 | | 14947 / 16072 | | 16623 / 16270 | | 2.3 |
| Wheels & Tires | 3.1 | Tire type - front/rear: C (cushion), SE (cushion super elastic), P (pneumatic) | | SE | | SE | | SE | | SE | | SE | | 3.1 |
| | 3.2 | Tire size: front | in | 355 / 65-15 ¹⁾ | | 8.25-15 ¹⁾ | | 8.25-15 ¹⁾ | | 8.25-15 ¹⁾ | | 315 / 70-15 ¹⁾ | | 3.2 |
| | 3.3 | Tire size: rear | in | 315/70-15 ¹⁾ | | 315/70-15 ¹⁾ | | 315/70-15 ¹⁾ | | 315/70-15 ¹⁾ | | 315/70-15 ¹⁾ | | 3.3 |
| | 3.5 | Wheels: number front (x = driven)/rear | | 2 x / 2 | | 4 x / 2 | | 4 x / 2 | | 4 x / 2 | | 4 x / 2 | | 3.5 |
| | 3.6 | Track width, front/rear | b10 in | 62.75 ²⁾ / 63 | | 68.81 / 63 | | 68.81 / 63 | | 68.81 / 63 | | 69.0 / 63 | | 3.6 |
| | Dimensions | 4.1 | Mast/fork carriage tilt: forward/ backward (simplex mast) | degrees | 5° / 9° | | 5° / 9° | | 5° / 9° | | 5° / 9° | | 5° / 9° | |
| 4.2 | | Height of mast lowered | h1 in | See mast table | | See mast table | | See mast table | | See mast table | | See mast table | | 4.2 |
| 4.3 | | Free lift | h2 in | See mast table | | See mast table | | See mast table | | See mast table | | See mast table | | 4.3 |
| 4.4 | | Lift | h3 in | See mast table | | See mast table | | See mast table | | See mast table | | See mast table | | 4.4 |
| 4.5 | | Height of mast extended | h4 in | See mast table | | See mast table | | See mast table | | See mast table | | See mast table | | 4.5 |
| 4.7 | | Height of overhead guard/cab | h6 in | 108.11 | | 108.11 | | 108.11 | | 108.11 | | 108.11 | | 4.7 |
| 4.8 | | Height of seat | h7 in | 59.17 | | 59.17 | | 59.17 | | 59.17 | | 59.17 | | 4.8 |
| 4.12 | | Height of tow coupling | h10 in | 33.34 | | 33.34 | | 33.34 | | 33.34 | | 33.34 | | 4.12 |
| 4.19 | | Overall length | l1 in | 182.63 | | 183 | | 183 | | 222.8 | | 246.6 | | 4.19 |
| 4.20 | | Length to fork face | l2 in | 135.4 | | 135.8 | | 135.8 | | 150.8 | | 162.5 | | 4.20 |
| 4.21 | | Overall width | b1 in | 74.5 | | 87.8 | | 87.8 | | 87.8 | | 90.5 | | 4.21 |
| 4.22 | | Fork dimensions | s/e/l in | 2.5 / 48 / 6 | | 2.75 / 48 / 6 | | 2.75 / 48 / 8 | | 2.75 / 72 / 8 | | 2.75 / 84 / 8 | | 4.22 |
| 4.23 | | Fork carriage | | 4 | | 4 | | 4 | | 4 | | 4 | | 4.23 |
| 4.24 | | Width of fork carriage | b3 in | 71 | | 86 | | 86 | | 86 | | 86 | | 4.24 |
| 4.31 | | Ground clearance under mast, with load | m1 in | 8 | | 8 | | 8 | | 8 | | 8 | | 4.31 |
| 4.32 | | Ground clearance, center of wheelbase | m2 in | 9.72 | | 9.72 | | 9.72 | | 9.72 | | 9.72 | | 4.32 |
| 4.34 | Aisle width (48" long load) | Ast in | 201.1 | | 201.5 | | 201.6 | | 213.95 | | 225.4 | | 4.34 | |
| 4.35 | Outer turning radius | Wa in | 120.5 | | 120.5 | | 120.5 | | 131.7 | | 143.1 | | 4.35 | |
| 4.36 | Inner turning radius | b13 in | 38.4 | | 38.4 | | 38.4 | | 38.4 | | 38.4 | | 4.36 | |
| Performance | 5.1 | Travel speed, with/without load | mph | 14.4 | | 14.4 | | 14.4 | | 14.4 | | 14.4 | | 5.1 |
| | 5.2 | Lifting speed, with/without load | fpm | 112 / 114 | | 90 / 106 | | 90.5 / 106.3 | | 90.5 / 106.3 | | 90.5 / 106.3 | | 5.2 |
| | 5.3 | Lowering speed, with/without load | fpm | 110 / 104 | | 110 / 104 | | 110 / 104.3 | | 110 / 104.3 | | 110 / 104.3 | | 5.3 |
| | 5.5 | Drawbar pull, with/without load | lbs | 8542 / 7868 | | 11465 / 10341 | | 10116 / 9217 | | 11290 / 11290 | | 12262 / 12262 | | 5.5 |
| | 5.7 | Gradeability, with/without load | % | 24 / 34 | | 24 / 33 | | 24 / 33 | | 21 / 32 | | 21 / 32 | | 5.7 |
| | 5.9 | Acceleration time to max. speed, with/without load | s | 5.6 / 5 | | 6.1 / 5.5 | | 6.5 / 5.7 | | 6.6 / 5.8 | | 6.7 / 5.9 | | 5.9 |
| | 5.10 | Service brake | | Hydrostatic | | Hydrostatic | | Hydrostatic | | Hydrostatic | | Hydrostatic | | 5.10 |
| IC - Engine | 7.1 | Engine manufacturer/model | | Deutz TCD 2012 L4-2V | | Deutz TCD 2012 L4-2V | | Deutz TCD 2012 L4-2V | | Deutz TCD 2012 L4-2V | | Deutz TCD 2012 L4-2V | | 7.1 |
| | 7.2 | Engine output to ISO 1585 | hp | 116.6 | | 116.6 | | 116.6 | | 116.6 | | 116.6 | | 7.2 |
| | 7.3 | Rated speed | rpm | 2465 | | 2465 | | 2465 | | 2465 | | 2465 | | 7.3 |
| | 7.4 | Number of cylinders/engine displacement | cu in | 4 / 244 | | 4 / 244 | | 4 / 244 | | 4 / 244 | | 4 / 244 | | 7.4 |
| Other | 8.1 | Drive control | | Hydrostatic | | Hydrostatic | | Hydrostatic | | Hydrostatic | | Hydrostatic | | 8.1 |
| | 8.2 | Working pressure for attachments | psi | 3843 | | 3843 | | 3843 | | 3843 | | 3843 | | 8.2 |
| | 8.3 | Oil flow for attachments | gal/min | 18.5 | | 18.5 | | 18.5 | | 18.5 | | 18.5 | | 8.3 |
| | 8.4 | Maximum noise level at driver's ear (to EN 12053) | dBa | 76 | | 76 | | 76 | | 76 | | 76 | | 8.4 |

¹ Other tires optional

² 68.8 with twin tires