



LPG Forklift Trucks
Capacity 3000, 3500, 4000 and 4500 lb
H16CT, H18CT, H20CT, and H20CT-600
SERIES 391

Safety

Linde ProtectorFrame: The overhead guard and its supporting frame form a strong and completely enclosed protective zone providing optimum structural integrity and safety. The top mounted tilt cylinders provide seamless, smooth control of the tilt movements for excellent load stability in all operating conditions.

Performance

Low fuel consumption levels, low exhaust emissions, and impressive performance. Advanced engine and drive technology combined with the original Linde Load Control system enable the operator to use the truck's potential to maximise productivity. Comfortable and precise fingertip control of all hydraulic functions.

Comfort

Climb on board relaxed, finish the shift relaxed. Designed to the most advanced ergonomic standards. Spacious cab interior, adjustable armrest, suspension seat, and functional positioning of easy-actuation controls make for a stress-free working environment.



Reliability

Proven in tough sustained operations. Isolation of the cab from the mast, drive axle and chassis results in reduced shock and vibrations. Maintenance-free mounting of axles and tilt cylinders cuts downtime and operating costs.

Productivity

Effective and cost efficient: The "New Generation" Linde hydrostatic drive eliminates torque converter transmission, clutch, differential, and drum brakes. As a result, servicing costs are low, truck uptime is high and productivity is enhanced.

Standard and optional equipment

Standard equipment:

Linde twin drive pedals to control forward/reverse travel and braking

Linde Load Control integrated in armrest

Hydraulic-suspension comfort-class seat with extensive range of adjustments

Hydrostatic steering with on-demand power assist

Dual engine combustion air pre-cleaners

High-performance hydraulic filters

Comprehensive overhead digital instrumentation display (anti-glare surface)

Load back rest (LBR)

Plenty of storage space

Top-mounted tilt cylinders

Zero-maintenance mast and tilt cylinder mountings

Twin front work lamps

Regulated catalytic muffler (LP)

Parking brake

Tow pin

Anti restart ignition

Options:

Single drive pedal with direction selector positioned on armrest

Integral sideshift

Auxiliary hydraulic circuits for all mast types

Overhead guard can be upgraded to full cabin with roof, front and rear screens and doors (also available with tinted glass)

Wiper-washers for front, rear and roof screens

Cab heater with integral pollen filter

Roof shade, clipboard, interior lighting

Truck lighting, work lamps

Audible reversing alarm, amber warning light

Paperwork clip board

LPG ultrasonic fuel level indicator (currently not available)

17° Pivoting operators seat

Electronic tilt angle limiting

Custom paint

Mirrors

Other options available on request

Features

Original Linde Hydrostatic drive

- Responsive, smooth and precise driving
- No clutch, differential or drum brakes; hydrostatic drive assumes function of service brake
- Robust drive system, proven in severe duty environments
- Low maintenance costs and long life



Linde ProtectorFrame

- Safe and robust chassis, enclosed on all sides
- Engine hood and servicing doors open wide for convenient access to all components

Linde twin drive pedals

- Quick change of forward/reverse direction
- Short pedal stroke
- No leg fatigue
- Increased productivity

Linde Load Control

- Accurate, safe load handling
- Effortless fingertip control of all hydraulic functions
- Traction and all hydraulic functions completely separate

High-economy engine technology

- LPG engines incorporating the most advanced technology
- High torque
- Low fuel consumption
- Low exhaust gas emission levels



Linde operator compartment

- Designed to advanced ergonomic standards
- Spacious cab with automobile equivalent legroom
- Excellent visibility of load and surroundings
- Cushioned drive and steer axles reduce road shock
- Standard sound abatement design (75/73 dBa)

Linde Truck Control

- Reliable microprocessor controller technology
- Easily matched to individual application requirements
- Component protection resulting from redundant monitoring systems
- Automatic control of engine RPM

Linde clear-view mast

- Superb visibility
- Exceptional residual capacity
- Zero-maintenance shock mounting of mast and tilt cylinders
- Electronic limiting of tilt angle

ANSI CLASSIFICATION: Standard truck meets all applicable mandatory requirements of ANSI/ITSDF 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.

Technical data

October 2008

| | | | |
|-----------------|------------------------------|--|---------------------------------------|
| Characteristics | 1.1 | Manufacturer | |
| | 1.2 | Model designation | |
| | 1.3 | Power unit: battery, diesel, gasoline, LP gas, AC | |
| | 1.4 | Operation: manual, pedestrian, rider standing, rider seated, order picker | |
| | 1.5 | Load capacity | Q lb (t) |
| | 1.6 | Load center | c in (mm) |
| | 1.8 | Load distance (axle center to fork face) | x in (mm) |
| | 1.9 | Wheelbase | y in (mm) |
| Weight | 2.1 | Service weight | lb (kg) |
| | 2.2 | Axle loading with load, front/rear | lb (kg) |
| | 2.3 | Axle loading without load, front/rear | lb (kg) |
| Wheels & Tires | 3.1 | Tire type - front/rear: C (cushion), SE (cushion super elastic), P (pneumatic) | |
| | 3.2 | Tire size: front | in (mm) |
| | 3.3 | Tire size: rear | in (mm) |
| | 3.5 | Wheels: number front/rear (x = driven) | |
| | 3.6 | Track width, front | b10 in (mm) |
| | 3.7 | Track width, rear | b11 in (mm) |
| | Dimensions | 4.1 | Mast/fork carriage tilt: forward/back |
| 4.2 | | Height of mast lowered | h1 in (mm) |
| 4.3 | | Free lift | h2 in (mm) |
| 4.4 | | Lift | h3 in (mm) |
| 4.7 | | Height of overhead guard/cab | h6 in (mm) |
| 4.8 | | Height of seat | h7 in (mm) |
| 4.12 | | Height of tow coupling | h10 in (mm) |
| 4.19 | | Overall length | l1 in (mm) |
| 4.20 | | Length to fork face | l2 in (mm) |
| 4.21 | | Overall width | b1/b2 in (mm) |
| 4.22 | | Fork dimensions | s/e/l in (mm) |
| 4.23 | | Fork carriage: class | |
| 4.24 | | Width of fork carriage | b3 in (mm) |
| 4.31 | | Ground clearance under mast, with load | m1 in (mm) |
| 4.32 | | Ground clearance, center of wheelbase | m2 in (mm) |
| 4.33 | | Aisle width | Ast in (mm) |
| 4.35 | Turning radius | Wa in (mm) | |
| 4.36 | Minimum pivot point distance | b13 in (mm) | |
| Performance | 5.1 | Travel speed, with/without load | mph (km/h) |
| | 5.2 | Lifting speed, with/without load | fpm (m/s) |
| | 5.3 | Lowering speed, with/without load | fpm (m/s) |
| | 5.5 | Drawbar pull, with/without load | lbs (N) |
| | 5.7 | Climbing ability, with/without load | % |
| | 5.9 | Acceleration, with/without load | sec |
| | 5.10 | Service brake | |
| Engine | 7.1 | Engine manufacturer/type | |
| | 7.2 | Engine rating | hp (kw) |
| | 7.3 | Rated speed | rpm ¹ |
| | 7.4 | Number of cylinders/Engine displacement | cu in (cc) |
| Other | 8.1 | Traction control | |
| | 8.2 | Working pressure for attachments | psi (bar) |
| | 8.3 | Oil flow attachments | gal/min (l/min) |
| | 8.4 | Noise level at driver's ear | dB(A) |

¹ Add 1 in (25 mm) for triple mast

² Plus length of load plus clearance for 90° stack

| | Linde H16CT LP Rider seated | Linde H18CT LP Rider seated | Linde H20CT LP Rider seated | Linde H20CT-600 LP Rider seated |
|------------------|---------------------------------------|---------------------------------------|---------------------------------------|--|
| Q lb (t) | 3000 (1600) | 3500 (1800) | 4000 (2000) | 4500 (2000) |
| c in (mm) | 24 (500) | 24 (500) | 24 (500) | 24 (610) |
| x in (mm) | 14.3 (365) | 14.3 (370) | 14.5 (374) | 14.5 (374) |
| y in (mm) | 59.1 (1500) | 60.6 (1540) | 63.0 (1600) | 63.0 (1600) |
| lb (kg) | 6008 (2725) | 6371 (2890) | 6702 (3040) | 7044 (3195) |
| lb (kg) | 7717/1291 (3780/545) | 8583/1288 (4120/570) | 9412/1290 (4440/600) | 10322/1222 (4625/570) |
| lb (kg) | 2767/3241 (1255/1470) | 2866/3505 (1300/1590) | 2976/3726 (1350/1690) | 3075/3968 (1395/1800) |
| | C | C | C | C |
| in (mm) | 18 x 7 x 12 1/8 | 18 x 7 x 12 1/8 | 18 x 7 x 12 1/8 | 18 x 7 x 12 1/8 |
| in (mm) | 18 x 6 x 12 1/8 | 18 x 6 x 12 1/8 | 18 x 6 x 12 1/8 | 18 x 6 x 12 1/8 |
| | 2 x / 2 | 2 x / 2 | 2 x / 2 | 2 x / 2 |
| b10 in (mm) | 36.0 (914) | 36.0 (914) | 36.0 (914) | 36.0 (914) |
| b11 in (mm) | 34.4 (873) | 34.4 (873) | 34.4 (873) | 33.5 (851) |
| degrees | 6.0/6.0 | 6.0/6.0 | 6.0/6.0 | 6.0/4.0 |
| h1 in (mm) | See mast table | See mast table | See mast table | See mast table |
| h2 in (mm) | See mast table | See mast table | See mast table | See mast table |
| h3 in (mm) | See mast table | See mast table | See mast table | See mast table |
| h6 in (mm) | 83.6 (2123) | 83.6 (2123) | 83.6 (2123) | 83.9 (2130) |
| h7 in (mm) | 42.0 (1067) | 42.0 (1067) | 42.0 (1067) | 42.0 (1067) |
| h10 in (mm) | 21.9 (557) | 21.6 (549) | 20.9 (530) | 20.9 (530) |
| l1 in (mm) | 129.0 (3112) | 130.4 (3152) | 133.5 (3231) | 133.5 (3231) |
| l2 in (mm) | 87.0 ¹ (2212) ¹ | 88.4 ¹ (2252) ¹ | 91.5 ¹ (2331) ¹ | 91.5 ¹ (2331) ¹ |
| b1/b2 in (mm) | 43.0 ³ (1092) ³ | 43.0 ³ (1092) ³ | 43.0 (1092) | 43.0 (1092) |
| s/e/l in (mm) | 1.5x4x42 (40x80x900) | 1.5x4x42 (45x100x900) | 1.5x4x42 (45x100x900) | 1.5x4x42 (45x100x900) |
| | 2A | 2A | 2A | 2A |
| b3 in (mm) | 40.9 (1040) | 40.9 (1040) | 40.9 (1040) | 40.9 (1040) |
| m1 in (mm) | 3.7 (93) | 3.6 (92) | 3.7 (95) | 3.9 (99) |
| m2 in (mm) | 4.7 (119) | 4.6 (118) | 4.8 (121) | 4.7 (120) |
| Ast in (mm) | 93.3 ² (2370) ² | 94.9 ² (2411) ² | 98.2 ² (2495) ² | 98.2 ² (2495) ² |
| Wa in (mm) | 78.9 (2005) | 80.4 (2041) | 83.5 (2121) | 83.5 (2121) |
| b13 in (mm) | 23.6 (600) | 24.2 (615) | 25.1 (638) | 25.1 (638) |
| mph (km/h) | 10 (16) | 10 (16) | 10 (16) | 10 (16) |
| fpm (m/s) | 118.1/124.0 (0.6/0.63) | 118.1/124.0 (0.6/0.63) | 106.3/112.2 (0.54/0.57) | 118.1/124.0 (0.60/0.63) |
| fpm (m/s) | 112.2/112.2 (0.57/0.57) | 112.2/112.2 (0.57/0.57) | 112.2/112.2 (0.57/0.57) | 112.2/112.2 (0.57/0.57) |
| lbs (N) | 2900/2214 (12900/9850) | 2900/2293 (12900/10200) | 2900/2383 (12900/10600) | 2900/2405 (12900/10700) |
| % | 32 / 37 | 29 / 36 | 27 / 36 | 26 / 34 |
| sec | 4.9 / 4.3 | 5.0 / 4.5 | 5.1 / 4.6 | 5.2 / 4.7 |
| | Hydrostatic | Hydrostatic | Hydrostatic | Hydrostatic |
| | VW / CBS | VW / CBS | VW / CBS | VW / CBS |
| hp (kw) | 40.0 (30) | 40.0 (30) | 40.0 (30) | 40.0 (30) |
| rpm ¹ | 2100 | 2100 | 2100 | 2100 |
| cu in (cc) | 4/121 (4/1984) | 4/121 (4/1984) | 4/121 (4/1984) | 4/121 (4/1984) |
| | Hydraulic/ininitely variable | Hydraulic/ininitely variable | Hydraulic/ininitely variable | Hydraulic/ininitely variable |
| psi (bar) | 2466 (170) | 2466 (170) | 2466 (170) | 2466 (170) |
| gal/min (l/min) | 10.0 (38) | 10.0 (38) | 10.0 (38) | 10.0 (38) |
| dB(A) | 73 | 73 | 73 | 73 |

Capacity

391-01 Series Model H16CT

1.5" x 4" x 42" Forks**
SE 180/70-8 (18 X 7-8) SC 15 Drive Tires**
*Cascade HOSS model #55F-SSS-A196, for Linde

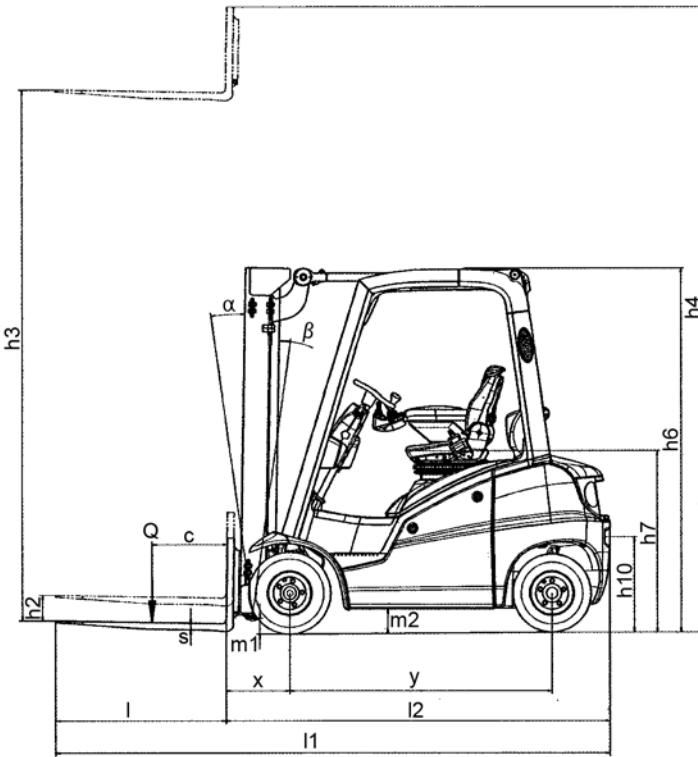
391-01 Series Model H18CT

1.5" x 4" x 42" Forks**
SE 200/50-10 SC 15 Drive Tires**
*Cascade 40.9" HOSS model #55F-SSS-A196, for Linde

Mast Capacity Table

| | | | | Capacity (lb) @ 24" Load Center** | | | Capacity (lb) @ 24" Load Center** | | |
|------|-------|------|---------|-----------------------------------|----------------------|----------------------|-----------------------------------|----------------------|----------------------|
| h1 | h3 | h2 | | Std. Carriage | Integral SS Carriage | Hang-on SS Carriage* | Std. Carriage | Integral SS Carriage | Hang-on SS Carriage* |
| 83.5 | 124.0 | 00.0 | Simplex | 3,000 | 3,000 | 2,865 | 3,500 | 3,500 | 3,280 |
| 91.5 | 138.5 | 00.0 | Simplex | 3,000 | 3,000 | 2,865 | 3,500 | 3,500 | 3,280 |
| 83.5 | 123.0 | 60.0 | Duplex | 3,000 | 3,000 | 2,865 | 3,500 | 3,500 | 3,280 |
| 91.5 | 139.0 | 68.0 | Duplex | 3,000 | 3,000 | 2,865 | 3,500 | 3,500 | 3,280 |
| 83.5 | 182.0 | 60.0 | Triplex | 3,000 | 2,850 | 2,820 | 3,500 | 3,375 | 3,280 |
| 85.5 | 188.0 | 62.0 | Triplex | 2,985 | 2,685 | 2,685 | 3,500 | 3,190 | 3,190 |
| 91.5 | 206.0 | 68.0 | Triplex | 2,650 | 2,175 | 2,175 | 3,245 | 2,630 | 2,630 |
| 97.5 | 215.0 | 70.5 | Triplex | 2,385 | 1,895 | 1,895 | 2,925 | 2,320 | 2,320 |

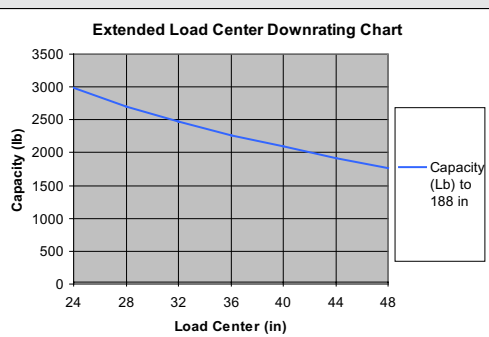
**Capacity ratings can be affected by changing forks, load center, and/or drive tires



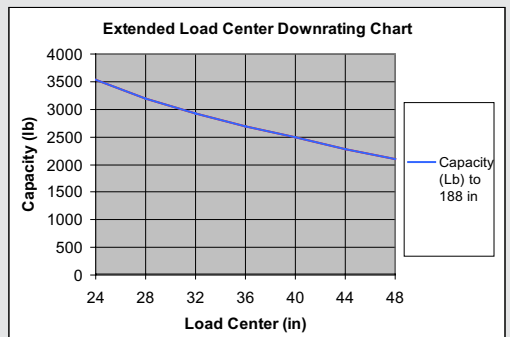
Downrating Charts

Reference cushion tires with standard carriage and forks only

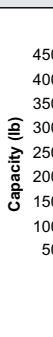
H16CT (188 Triplex Mast)



H18CT (188 Triplex Mast)



H2



CT 391-01 Series Model H20CT

1.5" x 4" x 42" Forks**
SE 200/50-10 SC 15 Drive Tires**

Linde *Cascade 40.9" HOSS model #55F-SSS-A196, for Linde

** Capacity (lb) @ 24" Load Center**

| on SS ge* | Std. Carriage | Integral SS Carriage | Hang-on SS Carriage* | h1 | h3 | h2 |
|--------------|------------------|-------------------------|-------------------------|------|-------|------------------|
| | 30 | 4,000 | 4,000 | | | |
| 30 | 4,000 | 4,000 | 3,670 | 91.5 | 138.5 | 0 |
| 30 | 4,000 | 4,000 | 3,670 | 83.5 | 123.0 | 60 |
| 30 | 4,000 | 4,000 | 3,670 | 91.5 | 139.0 | 68 |
| 30 | 4,000 | 3,775 | 3,670 | 83.5 | 182.0 | 60 ¹⁾ |
| 30 | 4,000 | 3,570 | 3,570 | 83.5 | 182.0 | 60 |
| 30 | 3,635 | 2,955 | 2,955 | 85.5 | 188.0 | 62 ²⁾ |
| 30 | 3,275 | 2,590 | 2,590 | 85.5 | 188.0 | 62 |

ve tires

391-01 Series Model H20CT-600

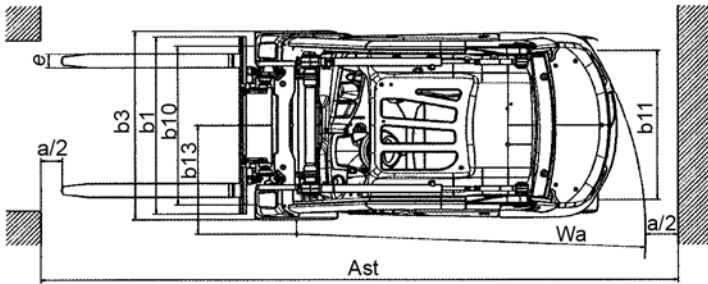
1.5" x 4" x 42" Forks**
Cushion 18 X 7x12 1/8 Drive Tires**

*Cascade 40.9" HOSS model #55F-SSS-A196, for Linde

** Capacity (lb) @ 24" Load Center**

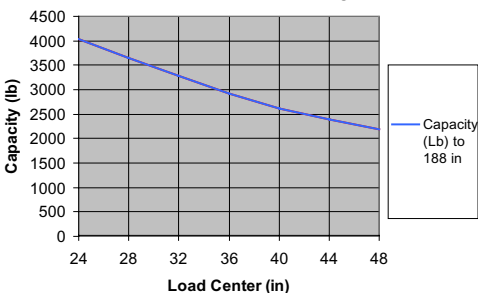
| on SS ge* | Std. Carriage | Integral SS Carriage | Hang-on SS Carriage* | h1 | h3 | h2 |
|--------------|------------------|-------------------------|-------------------------|------|-------|------------------|
| | 30 | 4,500 | 4,500 | | | |
| 30 | 4,500 | 4,500 | 4,245 | 91.5 | 138.5 | 0 |
| 30 | 4,500 | 4,500 | 4,245 | 83.5 | 123.0 | 60 |
| 30 | 4,500 | 4,500 | 4,245 | 91.5 | 139.0 | 68 |
| 30 | 4,500 | 4,500 | 4,245 | 83.5 | 182.0 | 60 ¹⁾ |
| 30 | 4,000 | 3,775 | 3,650 | 83.5 | 182.0 | 60 |
| 30 | 4,500 | 4,500 | 4,245 | 85.5 | 188.0 | 62 ²⁾ |
| 30 | 4,000 | 3,575 | 3,570 | 85.5 | 188.0 | 62 |

*1 and *2 H20CT-600 Triplex up to 157.5



H20CT (188 Triplex Mast)

Extended Load Center Downrating Chart



H20CT-600 (188 Triplex Mast)

Extended Load Center Downrating Chart

