

# GROVE® GCD09

## Product Guide

ASME B30.5 Imperial 85%, Metric 85%



9 USt  
(8,1 t)



33.2 ft  
(10,1 m)



GVW 17,174 lbs  
(7790 kg)



48 ft  
(14,6 m)

# GROVE GCD09

## FEATURES

The GCD09 offers a 33.2 ft (10,12m) three section full power main boom with a max capacity of 9 USt (8,1t). Compact dimensions, multiple steering modes, and two position outriggers make it easy to maneuver on the jobsite. The GCD09 also features a three position pivoting boom nose and a deck carrying capacity of 14,000 lbs (6350 kg), making it the ideal crane for transporting loads and working in confined spaces.



## Outriggers

The GCD09 outriggers are two-position (0% and 100%) beam/jack style with integral steel outrigger pads. Equipped with independent outrigger controls.

## Simplified Power

The dual fuel engine offers a practical solution for indoor operations and simplifies fuel logistics across mixed fleets. The GCD09 is available with an optional EPA Tier 4 Final emissions-compliant configuration—no SCR system, UREA injection, or Diesel Exhaust Fluid (DEF) required.



## Operator Cab

Simple operator cab features hydraulic joystick controls, easy-to-set up graphic RCL system, common automotive dash panel with gauges, indicator lights, and rocker switches. Fully adjustable seat and tilting steering wheel are standard features. An enclosed cab with split door is available for additional comfort.



## CUSTOMIZED OPTIONS

Standard options may not always meet the job requirements. Consult your local dealer for a Lift Solution quote for customized options, such as:

- Non-marking tires
- Barge charts
- Spark arrestor

## Steering Modes

The GCD09 comes standard with three steering modes: Front (two-wheel), four-wheel coordinated, and four-wheel crab steer with electronic self-alignment. Operators can choose between modes using a three-position rocker switch located on dash panel.



# The world's most advanced crane service and support network

## WORLDWIDE SUPPORT NETWORK

Manitowoc's customer service extends beyond any borders. Our locations span the globe, covering five continents. No matter where the job takes you, you have a business partner nearby.



## PARTS

Locating the correct part quickly is vital to managing your operations. With Manitowoc Customer Support, the parts you need are just a phone call or click away.

## LIFT SOLUTIONS

The Manitowoc Crane Lift Solutions Team is dedicated to helping customers with unique and customized applications for their Manitowoc cranes, regardless of product line.

## TRAINING

Manitowoc Training Centers offer courses for operators and technicians across the globe to provide in-depth instruction on crane operation, maintenance, and troubleshooting procedures.

## EnCORE

Manitowoc's EnCORE program maximizes your investment by rebuilding or repairing your crane to extend its life significantly. EnCORE also includes remanufactured parts.



# MANITOWOC FINANCE

Manitowoc Finance gets you in the field with the right equipment by giving you access to flexible, affordable financing. With Manitowoc Finance, equipment can be acquired with virtually no cash outlay, and unlike traditional lending, our financial products don't affect bank lines of credit. Your capital resources remain intact for times when you need ready access to cash.

Competitive rates with flexible financing options and payment schedules put you in control.

**Did you know?** Manitowoc Finance can finance **used** Manitowoc cranes. You can also **trade-in** your used fleet for upgrade and get financed by Manitowoc Finance.



GCD  
09

GCD  
09  
GROVE

Canifowoc

SAFETY  
WARNING  
OPERATION  
MANUAL





# CONTENTS

**8**

Dimensions and Weights

**10**

Working Range and Load Charts - Imperial

**14**

Working Range and Load Charts - Metric

**18**

Transportation and Lifting

**19**

Load Handling

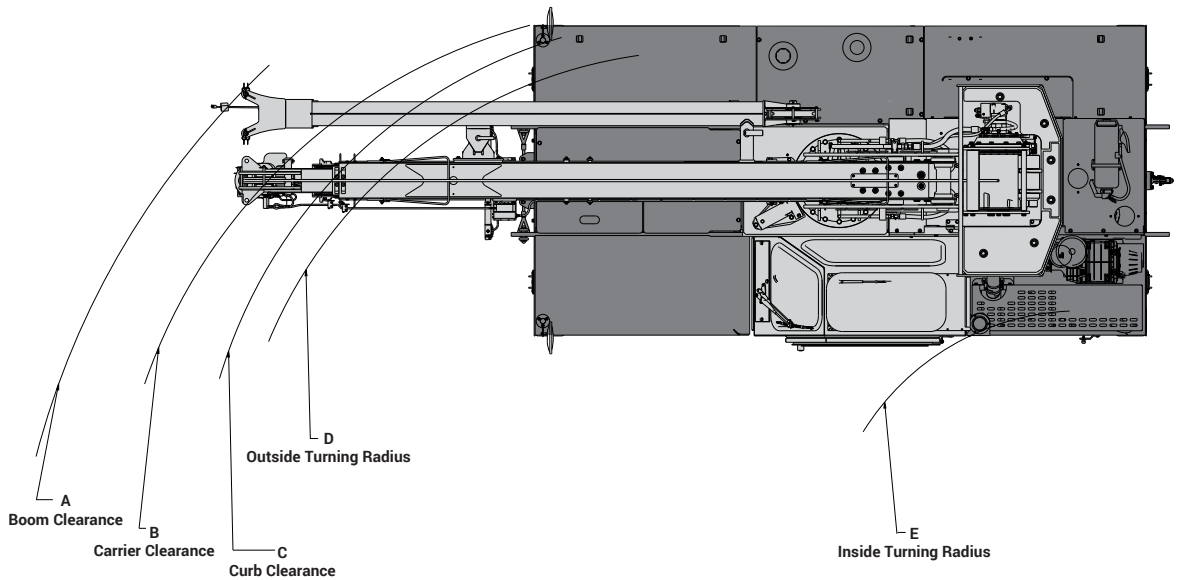
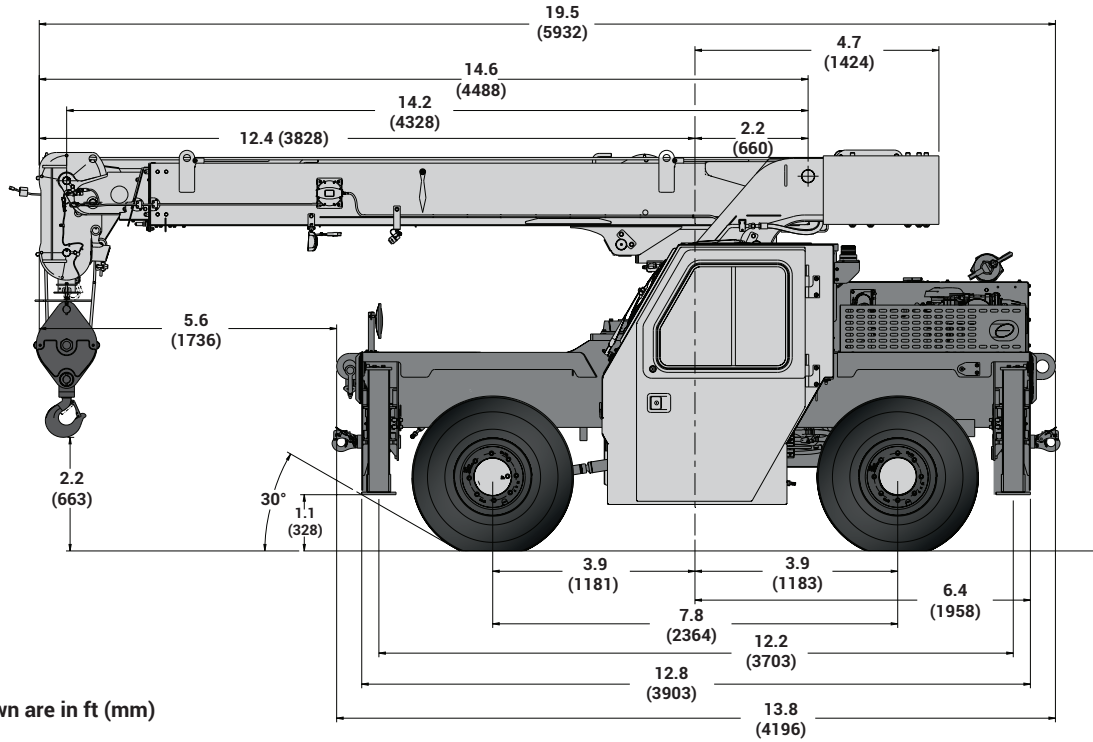
**20**

Specifications

**23**

Symbols Glossary

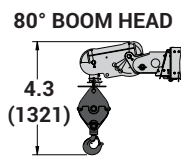
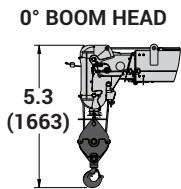
# DIMENSIONS AND WEIGHTS



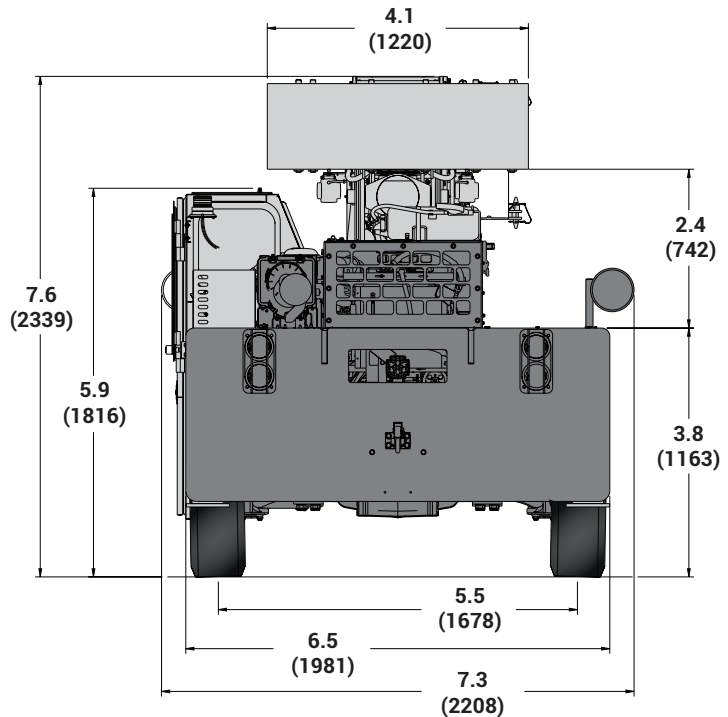
| Tire size | A                        | B                     | C                     | D                     | E                     | A                         | B                     | C                     | D                     | E                    |
|-----------|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------------------|-----------------------|-----------------------|-----------------------|----------------------|
| 10/16     | 255.8 in<br>(6498 mm)    | 218.6 in<br>(5552 mm) | 204.4 in<br>(5191 mm) | 198.8 in<br>(5050 mm) | 141.3 in<br>(3589 mm) | 182.9 in<br>(4646 mm)     | 143.6 in<br>(3648 mm) | 132.4 in<br>(3363 mm) | 125.2 in<br>(3180 mm) | 66.1 in<br>(1679 mm) |
|           | Two-wheel steer (radius) |                       |                       |                       |                       | Four-wheel steer (radius) |                       |                       |                       |                      |



# DIMENSIONS AND WEIGHTS



Dimensions are with the boom horizontal and the anti-two block bottomed.

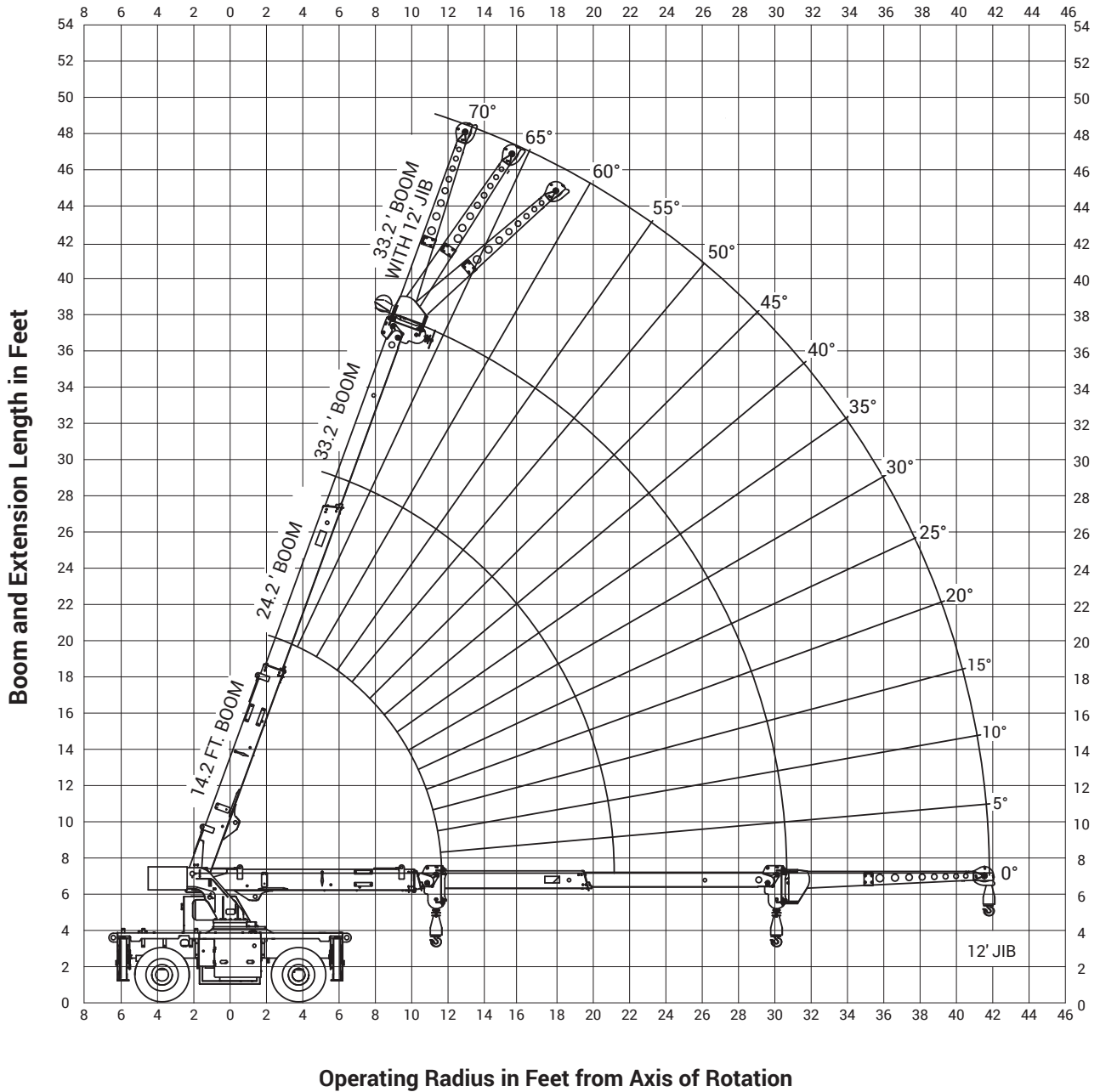


Dimensions shown are in ft (mm)

| Weights   | GVW           |             | Front       |             | Rear        |             |
|---|---------------|-------------|-------------|-------------|-------------|-------------|
|   | lb            | kg          | lb          | kg          | lb          | kg          |
| <b>Basic machine:</b> including 33.2 ft (10,12 m) main boom, main hoist with 120 ft (36,6 m) of wire rope, 12.5 USt (11.3 t) hook block, full counterweight, dual fuel engine and driver. | 17,174        | 7790        | 8534        | 3871        | 8640        | 3919        |
| <b>Add:</b> 12 ft (3,66 m) fixed swingaway extension and extension carrier brackets and downhaul weight.  | 487           | 221         | 684         | 310         | -197        | -89         |
| <b>Crane Weight</b>   | <b>17,661</b> | <b>8011</b> | <b>9218</b> | <b>4181</b> | <b>8443</b> | <b>3830</b> |
| <b>Basic machine:</b> including 33.2 ft (10,12 m) main boom, main hoist with 120 ft (36,6 m) of wire rope, 12.5 USt (11.3 t) hook block, full counterweight, dual fuel engine and driver. | 17,174        | 7790        | 8534        | 3871        | 8640        | 3919        |
| <b>Add:</b> Enclosed cab with heater and defroster.   | 203           | 92          | 96          | 43          | 107         | 49          |
| <b>Crane Weight</b>   | <b>17,377</b> | <b>7882</b> | <b>8630</b> | <b>3914</b> | <b>8747</b> | <b>3968</b> |

# WORKING RANGE

Imperial

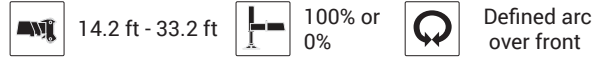


THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane

# LOAD CHART

## Imperial



| Feet | Main Boom Length in Feet |                 |                 |
|------|--------------------------|-----------------|-----------------|
|      | 14.2                     | 24.2            | 33.2            |
| 5    | 18,000<br>(66)           |                 |                 |
| 6    | 14,300<br>(61,5)         |                 |                 |
| 8    | 12,000<br>(51)           | 9,280<br>(69)   |                 |
| 10   | 10,350<br>(38)           | 9,120<br>(63,5) |                 |
| 12   | 7,830<br>(0)             | 8,040<br>(58)   | 7,430<br>(68)   |
| 14   |                          | 6,820<br>(52)   | 6,620<br>(64)   |
| 16   |                          | 5,470<br>(45,5) | 5,680<br>(60)   |
| 18   |                          | 4,510<br>(37,5) | 4,690<br>(55,5) |
| 20   |                          | 3,800<br>(28)   | 3,950<br>(51)   |
| 22   |                          | 3,250<br>(0)    | 3,380<br>(46,5) |
| 24   |                          |                 | 2,920<br>(41)   |
| 26   |                          |                 | 2,550<br>(35)   |
| 28   |                          |                 | 2,240<br>(28)   |
| 30   |                          |                 | 1,980<br>(17,5) |
| 31   |                          |                 | 1,870<br>(0)    |

| Feet | Main Boom Length in Feet |                 |                 |
|------|--------------------------|-----------------|-----------------|
|      | 14.2                     | 24.2            | 33.2            |
| 5    | 18,000<br>(66)           |                 |                 |
| 6    | 14,300<br>(61,5)         |                 |                 |
| 8    | 12,000<br>(51)           | 9,280<br>(69)   |                 |
| 10   | 10,350<br>(38)           | 9,120<br>(63,5) |                 |
| 12   | 7,830<br>(0)             | 8,040<br>(58)   | 7,430<br>(68)   |
| 14   |                          | 7,200<br>(52)   | 6,620<br>(64)   |
| 16   |                          | 5,980<br>(45,5) | 5,990<br>(60)   |
| 18   |                          | 4,940<br>(37,5) | 5,010<br>(55,5) |
| 20   |                          | 4,170<br>(28)   | 4,230<br>(51)   |
| 22   |                          | 3,570<br>(0)    | 3,640<br>(46,5) |
| 24   |                          |                 | 3,160<br>(41)   |
| 26   |                          |                 | 2,790<br>(35)   |
| 28   |                          |                 | 2,470<br>(28)   |
| 30   |                          |                 | 2,210<br>(17,5) |
| 31   |                          |                 | 2,120<br>(0)    |

\*NOTE: () Boom angles are in degrees.

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane

# LOAD CHART

Imperial



Pounds

| Main Boom Angle (°) | 0° OFFSET               |                         | 15° OFFSET              |                         | 30° OFFSET              |                         |
|---------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
|                     | Up to 24.2' boom length | Up to 33.2' boom length | Up to 24.2' boom length | Up to 33.2' boom length | Up to 24.2' boom length | Up to 33.2' boom length |
| 70                  | 7590                    | 5220                    | 5420                    | 4280                    | 4370                    | 3630                    |
| 65                  | 5850                    | 4290                    | 4500                    | 3590                    | 3800                    | 3160                    |
| 60                  | 4720                    | 3300                    | 3860                    | 2880                    | 3370                    | 2660                    |
| 55                  | 3980                    | 2750                    | 3390                    | 2460                    | 3040                    | 2310                    |
| 50                  | 3300                    | 2280                    | 2950                    | 2090                    | 2730                    | 1970                    |
| 45                  | 2860                    | 1920                    | 2600                    | 1800                    | 2450                    | 1730                    |
| 40                  | 2540                    | 1690                    | 2370                    | 1600                    | 2270                    | 1550                    |
| 35                  | 2320                    | 1500                    | 2190                    | 1460                    | 2150                    | 1430                    |
| 30                  | 2130                    | 1380                    | 2050                    | 1360                    | 2050                    | 1330                    |
| 25                  | 1960                    | 1280                    | 1930                    | 1260                    |                         |                         |
| 20                  | 1870                    | 1200                    | 1870                    | 1200                    |                         |                         |
| 15                  | 1810                    | 1130                    | 1840                    | 1150                    |                         |                         |
| 10                  | 1770                    | 1110                    |                         |                         |                         |                         |
| 5                   | 1740                    | 1080                    |                         |                         |                         |                         |
| 0                   | 1720                    | 1080                    |                         |                         |                         |                         |

**NOTES:**

1. 12 ft boom extension may be used for single line lifting service only.
2. **WARNING:** Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane

# LOAD CHART

Imperial



| Radius in Feet | Defined Arc 8° Over Front | Stationary 360° |
|----------------|---------------------------|-----------------|
| 5              | 13,450                    | 10,500          |
| 6              | 11,950                    | 8610            |
| 8              | 9730                      | 6540            |
| 10             | 8100                      | 4570            |
| 12             | 5890                      | 3350            |
| 14             | 4830                      | 2720            |
| 16             | 3880                      | 2210            |
| 18             | 3190                      | 1840            |
| 20             | 2680                      | 1500            |
| 22             | 2280                      | 1220            |
| 24             | 1970                      | 1150            |
| 26             | 1700                      | 980             |
| 28             | 1470                      | 830             |
| 30             | 1280                      | 710             |
| 31             | 1200                      | 660             |

**NOTES:**

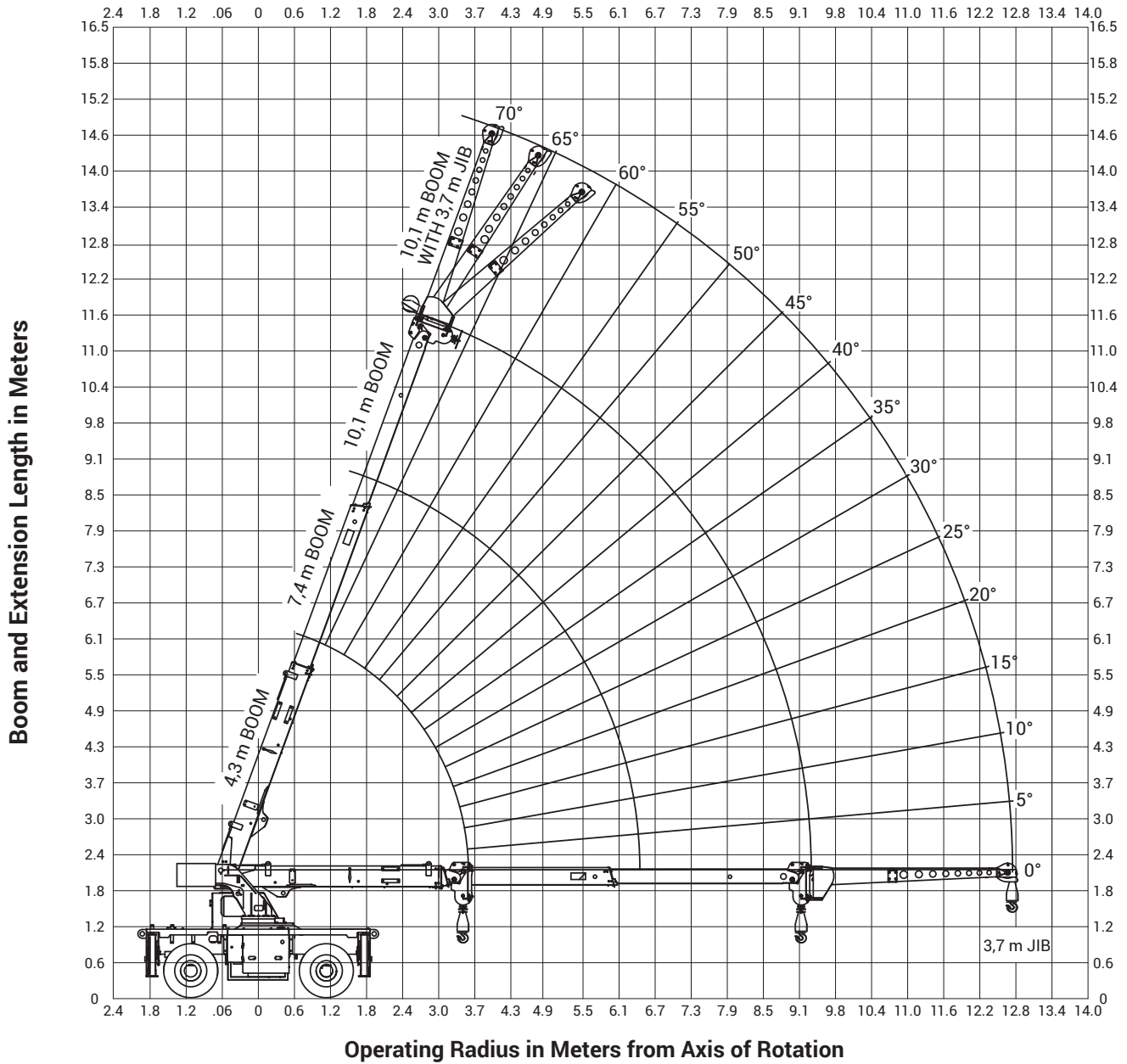
1. Capacities are in pounds and do not exceed 75% of tipping loads as determined by test in accordance with SAE J765.
2. Capacities are applicable to machines equipped with 10.00x15 (16 ply) at 125 psi cold inflation pressure.
3. Capacities are applicable only with machine on a smooth, level and firm surface.
4. Defined Arc - Over front includes 8° on either side of longitudinal centerline of machine.
5. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.
6. For pick and carry operation, the boom, using the shortest practical boom length, must be centered over front of machine. Maximum speed is 2.5 mph.
7. On rubber lifting with boom extension not permitted.

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane

# WORKING RANGE

Metric

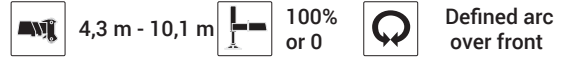


THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane

# LOAD CHART

## Metric



| Meters | Main Boom Length in Meters |                |                |
|--------|----------------------------|----------------|----------------|
|        | 4,3                        | 7,4            | 10,1           |
| 1,5    | 8100<br>(66,5)             |                |                |
| 1,8    | 6485<br>(62)               |                |                |
| 2,4    | 5440<br>(51,5)             | 4205<br>(69,5) |                |
| 3,0    | 4695<br>(39)               | 4135<br>(64)   |                |
| 3,6    | 3550<br>(0)                | 3645<br>(58,5) | 3370<br>(68)   |
| 4,3    |                            | 3055<br>(51,5) | 3000<br>(63,5) |
| 4,9    |                            | 2460<br>(45)   | 2555<br>(59,5) |
| 5,5    |                            | 2035<br>(37,5) | 2115<br>(55,5) |
| 6,1    |                            | 1720<br>(27,5) | 1790<br>(51)   |
| 6,7    |                            | 1475<br>(0)    | 1535<br>(46,5) |
| 7,3    |                            |                | 1330<br>(41)   |
| 7,9    |                            |                | 1165<br>(35,5) |
| 8,5    |                            |                | 1025<br>(28,5) |
| 9,1    |                            |                | 910<br>(18,5)  |
| 9,4    |                            |                | 855<br>(0)     |

| Meters | Main Boom Length in Meters |                |                |
|--------|----------------------------|----------------|----------------|
|        | 4,3                        | 7,4            | 10,1           |
| 1,5    | 8100<br>(66,5)             |                |                |
| 1,8    | 6485<br>(62)               |                |                |
| 2,4    | 5440<br>(51,5)             | 4205<br>(69,5) |                |
| 3,0    | 4695<br>(39)               | 4135<br>(64)   |                |
| 3,6    | 3550<br>(0)                | 3645<br>(58,5) | 3370<br>(68)   |
| 4,3    |                            | 3265<br>(51,5) | 3000<br>(63,5) |
| 4,9    |                            | 2710<br>(45)   | 2715<br>(59,5) |
| 5,5    |                            | 2240<br>(37,5) | 2270<br>(55,5) |
| 6,1    |                            | 1890<br>(27,5) | 1915<br>(51)   |
| 6,7    |                            | 1615<br>(0)    | 1650<br>(46,5) |
| 7,3    |                            |                | 1430<br>(41)   |
| 7,9    |                            |                | 1265<br>(35,5) |
| 8,5    |                            |                | 1120<br>(28,5) |
| 9,1    |                            |                | 1000<br>(18,5) |
| 9,4    |                            |                | 960<br>(0)     |

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane

# LOAD CHART

Metric



3,7 m



100%



360°



Kilograms

| Main Boom Angle (°) | 0° OFFSET               |                          | 15° OFFSET              |                          | 30° OFFSET              |                          |
|---------------------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|--------------------------|
|                     | Up to 7,4 m boom length | Up to 10,1 m boom length | Up to 7,4 m boom length | Up to 10,1 m boom length | Up to 7,4 m boom length | Up to 10,1 m boom length |
| 70                  | 3440                    | 2365                     | 2455                    | 1940                     | 1980                    | 1645                     |
| 65                  | 2650                    | 1945                     | 2040                    | 1625                     | 1720                    | 1430                     |
| 60                  | 2140                    | 1495                     | 1750                    | 1305                     | 1525                    | 1205                     |
| 55                  | 1805                    | 1250                     | 1535                    | 1115                     | 1375                    | 1050                     |
| 50                  | 1495                    | 1030                     | 1325                    | 945                      | 1240                    | 890                      |
| 45                  | 1295                    | 870                      | 1180                    | 815                      | 1105                    | 785                      |
| 40                  | 1150                    | 765                      | 1075                    | 725                      | 1025                    | 700                      |
| 35                  | 1050                    | 680                      | 990                     | 660                      | 970                     | 650                      |
| 30                  | 965                     | 625                      | 930                     | 615                      | 930                     | 600                      |
| 25                  | 890                     | 580                      | 875                     | 570                      |                         |                          |
| 20                  | 850                     | 540                      | 845                     | 540                      |                         |                          |
| 15                  | 820                     | 510                      | 835                     | 520                      |                         |                          |
| 10                  | 800                     | 500                      |                         |                          |                         |                          |
| 5                   | 790                     |                          |                         |                          |                         |                          |
| 0                   | 775                     |                          |                         |                          |                         |                          |

**NOTES:**

1. 3,7 m boom extension may be used for single line lifting service only.
2. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane



# LOAD CHART

Metric



| Radius in Meters | Defined Arc 8° Over Front | Stationary 360° |
|------------------|---------------------------|-----------------|
| 1,5              | 6115                      | 4760            |
| 1,8              | 5435                      | 3905            |
| 2,4              | 4415                      | 3045            |
| 3,0              | 3675                      | 2125            |
| 3,6              | 2755                      | 1570            |
| 4,3              | 2165                      | 1220            |
| 4,9              | 1750                      | 995             |
| 5,5              | 1445                      | 830             |
| 6,1              | 1220                      | 705             |
| 6,7              | 1040                      | 600             |
| 7,3              | 900                       | 530             |
| 7,9              | 780                       | 450             |
| 8,5              | 675                       | 385             |
| 9,1              | 590                       | 330             |
| 9,4              | 555                       | 305             |

**NOTES:**

1. Capacities are in pounds and do not exceed 75% of tipping loads as determined by test in accordance with SAE J765.
2. Capacities are applicable to machines equipped with 10.00x15 (16 ply) at 8.6 bar cold inflation pressure.
3. Capacities are applicable only with machine on a smooth, level and firm surface.
4. Defined Arc - Over front includes 8° on either side of longitudinal centerline of machine.
5. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.
6. For pick and carry operation, the boom, using the shortest practical boom length, must be centered over front of machine. Maximum speed is 4 km/h.
7. On rubber lifting with boom extension not permitted.

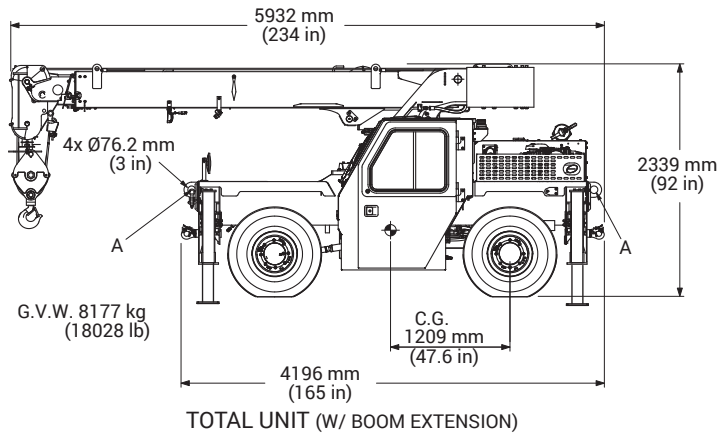
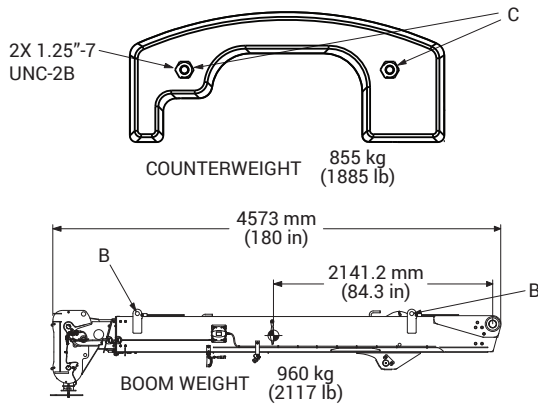
THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane

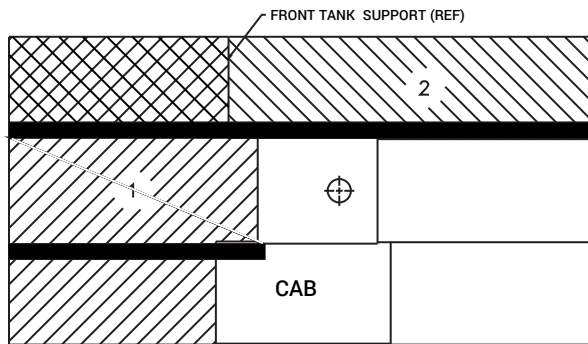
# TRANSPORTATION & LIFTING

1. Lifting of entire crane or major crane assemblies must be accomplished by utilizing specific fittings indicated on adjacent chart. Use of fittings for purposes other than those designated on chart is prohibited. Fitting capacities are maximum allowable loads per individual fitting.
2. Rigging personnel shall be responsible for proper selection and placement of all slings and load handling devices.
3. Dimensions and weights shown are estimated for largest configuration available. Weights do not include boom extension and/or jib, unless otherwise indicated.
4. Rigging personnel shall verify dimensions as required for clearance.
5. Do not use counterweight lift locations or boom sling point for lifting or tie down of entire crane.
6. Lifting of the counterweight to be accomplished with a properly rated 1.25" - 7 UNC fitting.

| FITTING | NO. / UNIT | LIFT | TOW | TIE DOWN | BOOM<br>LIFT | CWT<br>LIFT | CAPACITY TONS |              |              |            |              |
|---------|------------|------|-----|----------|--------------|-------------|---------------|--------------|--------------|------------|--------------|
|         |            |      |     |          |              |             | LIFT          | TOW          | TIE DOWN     |            |              |
|         |            |      |     |          |              |             |               |              | FORE & AFT   | SIDE       | DOWN         |
| A       | 4          | X    | X   | X        |              |             | 18.1<br>(20)  | 52.6<br>(58) | 52.6<br>(58) | 6.4<br>(7) | 12.7<br>(14) |
| B       | 4          |      |     |          | X            |             | 7.3<br>(8)    |              |              |            |              |
| C       | 2          |      |     |          |              | X           | 1.6<br>(1.7)  |              |              |            |              |



## Load Distribution For Carrydeck



### Maximum Allowable Uniformly Distributed Load

**AREA 1**  
14,000 lb (6350 kg)

OR

**AREA 2**  
9500 lb (4309 kg)

1. Maximum travel speed with any or all loads - 2.5 mph (4 kmh)
2. Loads to be transported on smooth level firm surfaces only.
3. Boom must be retracted and in center forward position, and lowered as much as the load allows.
4. Pick and carry loads may be transported on either Deck Area 1 or Deck Area 2; combined loading of Deck Area 1 and Deck Area 2 not permitted.
5. Lifting is not permitted when carry deck is loaded except for loading and unloading carry deck.
6. The maximum pick and carry loads may be transported on deck area 1 provided the load is centered over the front axle and cribbed directly on the frame rails.

# LOAD HANDLING

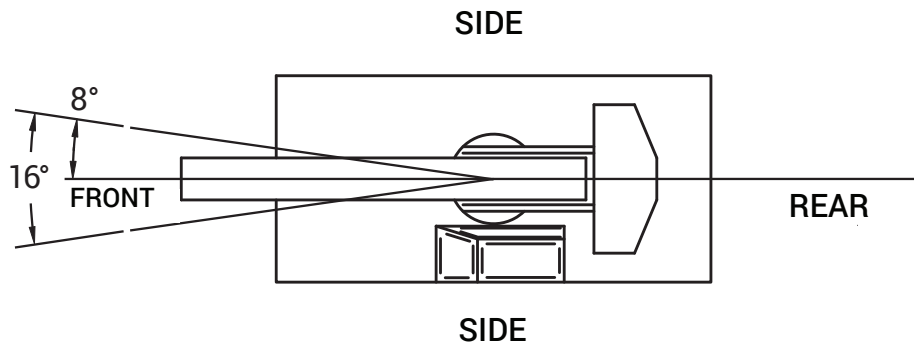
## Weight Reductions for Load Handling Devices

| 12 ft Fixed Offsettable Extension   |        |
|---|--------|
| *Stowed   | N/A    |
| *Erected  | 740 lb |
| *Reduction of main boom capacities  |        |
| When lifting over swingaway and/or jib combinations, deduct total weight of all load handling devices reeved over main boom nose directly from swingaway or jib capacity. |        |

| Hook Blocks And Headache Balls   |         |
|--|---------|
| 12.5 USt, one-sheave hook block  | 187 lb+ |
| 6.25 USt downhaul weight   | 135 lb+ |
| +Refer to rating plate for actual weight   |         |
| NOTE: All load handling devices and boom attachments are considered part of the load and suitable allowances MUST BE MADE for their combined weights. Weights are for Grove furnished equipment. |         |

| Tire Inflation - Bar (PSI) |            |  |
|----------------------------|------------|--|
| Size<br>(Front & Rear)     | Ply Rating | Lifting Service, General<br>Travel & Extended Travel |
|                            |            | Static & 2.5 MPH                                     |
| Deestone 10.00-15 LPT      | 16         | 125  |

## Lifting Area Diagram



## Line Pulls and Reeving Information

| Hoists      | Cable Specs.   | Permissible Line Pulls | Nominal Cable Length |
|-------------|--|------------------------|----------------------|
| <b>Main</b> | 9/16" 6x19 class<br>Bridon EEIPS (XXIPS)<br>Min. breaking strength 37,000 lb         | 9000 lb*               | 120 ft               |
| <b>Main</b> | 9/16" 8x25 Galv.<br>Min. breaking strength 43,800 lb                                 | 9000 lb*               | 120 ft               |
| <b>Main</b> | 9/16" 35x7 class<br>Python Dynamiq Bright EEIPS+<br>Min. breaking strength 50,000 lb | 9000 lb*               | 120 ft               |

The approximate weight of 9/16" wire rope is 0.59 lb/ft.

\*With certain boom and hoist tackle combinations, the allowable line pull may be limited by hoist performance. Refer to hoist performance table for lift planning to ensure adequate hoist performance on drum rope layer required.

# SPECIFICATIONS

## Superstructure



### Boom

14.2 ft - 33.2 ft (4,3 m – 10,1 m) full-power main boom. Three-section, full-power, proportional boom.  
Maximum tip height: 37 ft (11,3 m)



### \*Optional Swingaway Extension

12 ft (3,6 m) offsettable swingaway extension. Offsets 0°, 15° and 30° via pivoting boom nose. Stows alongside base boom section.  
Maximum tip height: 48 ft (14,6 m)



### Boom Nose

Nylatron sheaves mounted on heavy-duty needle roller bearings with removable pin type rope guards. Quick reeve type boom nose with three positions (0°, +40° and +80°) pivoting to minimize head height requirements. Lowers head height by 1.3 ft (0,4 m).



### Boom Elevation

Single double acting hydraulic cylinders with integral holding valves provides elevation from 0° to +70°.



### Anti-two Block Device

Standard anti-two block device, which, when activated, provides an audible warning to the operator and “locks-out” all functions whose movement can cause two-blocking.



### Rated Capacity Limiter (RCL)

Full-color, graphical display of boom angle, boom length, boom radius, rated load and calculated load. Allows for operator inputs to set the crane configuration. RCL system is hardwired and calculates load via pressure transducers in the lift cylinder. Display includes a color-coded light bar and audible alarm with function cut-out if load exceeds the load chart parameters.



### Swing

Ball bearing swing circle with 360° continuous rotation. Worm gear and pinion driven by hydraulic motor.  
Maximum speed: 2.05 rpm



### Hydraulic System

One pressure compensated variable displacement axial piston pump with load sensing.  
Maximum output of: 40 gpm (151 lpm).  
Maximum operating pressure: 2500 psi (172 bar).  
Four-section valve bank, chassis mounted, operated via dash mounted, hydraulic pilot controls. 22.5 gal (85 L) hydraulic reservoir with sight level gauge.  
3 micron return line filter with full flow by-pass protection and service indicator.



### Hoist Specifications

Geroler motor driven with automatic spring-applied / hydraulically released wet brake. Drum rotation indicator in the hoist joystick control and hoist direction indicator light on dashboard.

**Maximum hoist pull (first layer):** 10,769 lb (4885 kg)

**Maximum permissible single line pull:** 9000 lb (4082 kg) (3.5:1 design factor)

**Maximum single line speed:** 112 fpm (34 m/mm)

**Rope construction:** 35x7 EEIPS+/WSC

**Rope diameter:** 9/16 in (14 mm)

**Rope length:** Main hoist: 120 ft (36.6 m)

**Maximum usable rope:** Main hoist: 125 ft (38 m)

*\*Denotes optional equipment*

# SPECIFICATIONS

## Carrier



### Chassis

High-strength alloy frame constructed with integral outrigger housings; front and rear lifting, tie-down , and towing lugs. 25.2 ft<sup>2</sup> (2,34 m<sup>2</sup>) carrydeck size with 14,000 lb (6350 kg) deck only carrying capacity. Deck coated with anti-skid treatment.



### Outriggers

Hydraulic telescoping beam with oblique type jack provides extended and down retracted and down lifting capacities. Integral holding valves on both beam and jack.

Outrigger pad size: 8 in x 7.87 in (203,2 mm x 200 mm) rectangular steel fabrication

Maximum outrigger pad load: 14,980 lb (6795 kg)



### Outrigger Controls

Independent outrigger controls. 360° bubble level located inside cab.



### Engine (EPA Tier 4F)

Cummins QSF 2.8 L, four-cylinder / turbo charged water cooled diesel rated at 74 hp (55.1 kW) at 2,500 rpm, includes Cummins catalyst, hour meter, cold start aid (grid heater), 120V engine block heater, and air filter service indicator. Engine shut down feature. Meets EPA emissions. Requires maximum 15 ppm "Ultra Low Sulfur Diesel."

*Note: Required for USA and Canada.*



### Engine (EPA Tier 3)

Cummins QSF EPA, CARB (Tier III) off-highway certified; 4 cylinder turbo charged water cooled diesel; 72 hp @ 2400 RPM. Engine hour meter located in dash display.

*Note: Required for sale outside the USA, Canada and European Union; good for up to 5000 ppm sulfur diesel fuel.*



### Engine (Dual Fuel)

KEM3.0L EFI gasoline /LP gas engine, 07 EPA and CARB certified, 78 hp at 2500 RPM (gasoline) and 63 hp at 2500 RPM (LPG), with engine shutdown feature. (LP tank not included.)



### Fuel Tank Capacity

17.7 gal (67 L)



### Transmission

Powershift with four speeds forward and three speeds reverse. Stalk mounted direction shifter with rotary gear selection.



### Operators Control Station

Frame mounted, open air style control station with cab shell includes all crane functions, driving controls, and overhead safety glass. Other standard equipment includes a deluxe seat with seat belt, hour meter sight level bubble and 2.5 lb (1,13 kg) fire extinguisher.

The dash panel includes a multi-cluster gauge showing fuel, water temperature, battery voltage and engine fault codes. An engine monitoring indicator lamp shows engine warning, stop engine, wait to start, transmission high temperature, low brake system pressure, and hydraulic oil temperature. The RCL display is mounted to the top of the front dash.



### \*Operators Control Station-Enclosed

Includes the standard cab shell with the addition of front, rear and right side glass, a split (2 piece) hinged door with sliding glass, front windshield wiper and washer, hot water heater and defroster with fan and cab dome light are included.



### Electrical system

One 12 V maintenance-free battery, 730 CCA each at 0°.

105 amp alternator Dual fuel

120 amp alternator T3 and T4



### Drive

Front-wheel drive as standard

# SPECIFICATIONS

## Carrier (cont.)



### Steering

Standard three steering modes. Front two-wheel, four-wheel coordinated, and four-wheel crab steer with electronic self-alignment, three-position rocker selector on dash panel.

#### Outside turning radius:

- Two-wheel steer: 5050 mm 198.8 in
- Four-wheel steer: 3180 mm 125.2 in



### Axles

- Front: Drive/steer
- Rear: Non-drive/steer
- Front and rear axle are rigid mounted to frame.



### Brakes

Hydraulic actuated internal wet-disc service brakes acting on front wheels. Dash mounted toggle switch with light for activating or release of the dry disc parking brake mounted on the axle input.



### Tires

Standard: 10.00 x 15, 16 ply, bias type tires



### Lights

Full lighting including turn indicators, head, tail brake and hazard warning light recessed mounted.



### Maximum Speed

19.2 mph (30.9 km/h)



### Gradeability (theoretical)

Gas 84.8% with 14,000 lb (9072 kg) load

LP 69.2% with 14,000 lb (9072 kg) load

Diesel 90.3% with 14,000 lb (9072 kg) load



### Gross Vehicle Weight (GVW)

Tier 4 Final Diesel engine with enclosed cab and hookblock: 17,355 lb (7872 kg)

Dual Fuel engine with enclosed cab and hookblock: 17,127 lb (7769 kg)

### Miscellaneous Standard Equipment

- Back-up motion alarm
- Outrigger motion alarm
- Hoist drum rotation indicator

#### \* Optional equipment

- Auxiliary lighting package: includes amber strobe light and boom mounted work lights
- Convenience package: includes front and rear pintle hitch and headlight/taillight grille covers
- Enclosed cab package: includes heater and defroster, cab dome light, all window glass, and two-piece split door
- Offsettable swing away boom extension includes bottom swivel hook block for single part usage
- Air conditioning
- 6000 lb (2721,6 kg) capacity hydraulic below-deck mounted tow winch
- Searcher hook
- Vertical light tower
- Hoist drum rotation and rear view camera system

# SYMBOLS GLOSSARY



Axles



Chassis



Gross Vehicle Weight (GVW)



Rotation



Anti-Two Block Device



Counterweight



Hoist



Speed



Boom



Drive



Hydraulic System



Steering



Boom Elevation



Electrical System



Lights



Swing



Boom Extension



Engine



Outriggers



Tires



Boom Nose



Extension



Outrigger Controls



Transmission



Brakes



Fuel Tank Capacity



Radius



Cab



Gradeability



Rated Capacity Limiter (RCL)

# The Manitowoc Company, Inc.

## Regional headquarters

### Americas

Milwaukee, Wisconsin, USA  
Tel: +1 414 760 4600

Shady Grove, Pennsylvania, USA  
Tel: +1 717 597 8121

### Europe and Africa

Dardilly, France - TOWERS  
Tel: +33 (0) 4 72 18 20 20

Wilhelmshaven, Germany - MOBILE  
Tel: +49 (0) 4421 294 0

### APAC

Shanghai, China  
Tel: +86 21 6457 0066

### Singapore

Tel: +65 6264 1188

### Middle East and India

Dubai, UAE  
Tel: +971 4 8862677

© 2025 The Manitowoc Company, Inc.  
Form No. GCD09  
Part No. 18-009/0625

This document is non-contractual. Constant improvement and engineering progress make it necessary that we reserve the right to make specification, equipment, and price changes without notice. Illustrations shown may include optional equipment and accessories and may not include all standard equipment.



[manitowoc.com](https://www.manitowoc.com)