

Grove Manitowoc National Crane Potain



Grove YB4400 Series

Product Guide



- YB4409: 7,7 t (8.5 USt) three-section boom
- YB4409XL: 7,7 t (8.5 USt) three-section boom with 10,2 m (33 ft 6 in) tip height
- with 11,6 m (38 ft 2 in) tip height
- YB4411: 9,5 t (10.5 USt) three-section boom with 11,6 m (38 ft 2 in) tip height
- 1,8 m (6 ft) fixed extension (YB4409/XL) and 3,6 m (12 ft) offsettable swingaway extension (YB4409-2 and YB4411)
- 63,4 kW (85 bhp) Cummins diesel engine or 59,6 kW (80 bhp) GM EFI dual fuel engine



Features



Boom Standard:

6,4m (21 ft) main boom on the YB4409. 9,1m (30 ft) main boom on the YB4409XL. 10, 0 m (32 ft 10 in) main boom on the YB4409-2 and YB4411.

Optional: Manual fourth main boom section adds 3,0 m (10 ft) additional main boom length on YB4409 and YB4409-XL only.



Engine Standard: Cummins QSB 3.3 L turbo-charged diesel rated at 63,4 kW (85 bhp) at 2600 rpm.



Cab
Standard: Open air cab shell with overhead safety glass

Optional: Closed cab with hinged door, heater/ defroster, and all window glass



Pivoting boom nose

Standard on the YB4409-2 and YB4411 the exclusive pivoting boom nose allows operators to decrease the overall boom head depth and operate in more confined areas.



Steering

Standard: Four-wheel coordinated steer Standard: two-wheel, four-wheel, and crab steer with self alignment (YB4411) Optional: two-wheel, four-wheel, and crab steer (standard on YB4409-2)



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Specifications

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■N Boom

YB4409: 2,9 m - 6,5 m (9 ft 8 in - 21 ft 2 in) threesection full power boom. Maximum tip height: 7,6 m (25 ft 2 in)

YB4409XL: 3,8 m - 9,2 m (12 ft 8 in - 30 ft 2 in) three- section full power boom. Maximum tip height: 10,2 m (33 ft 6 in)

YB4409-2 and YB4411: 4,2 m - 10,0 m (13 ft 10 in 32 ft 10 in) three-section full power boom. Maximum tip height: 11,6 m (38 ft 2 in)



*Optional boom

YB4409 and YB4409XL: Manual fourth main boom fly section adds 3,0 m (10 ft) additional boom length.



🌮 °Boom extension

YB4409 and YB4409XL: 1,8 m (6 ft) fixed pin on extension

YB4409-2 and YB4411: 3,6 m (12 ft) offsettable extension

3,6 m - 5,4 m (12 ft- 18 ft) telescopic offsettable extension



Boom nose

YB4409 / XL: Single sheave non-pivoting

YB4409-2 and YB4411: Single sheave, three-position (0°, + 30°, + 80°) pivoting boom nose for minimizing head space requirements. Lowers head height. 0,26 m (10.5 in) when nose is pivoted fully forward.



Boom elevation

Single double acting hydraulic cylinder with integral holding valve.

Elevation: 0° to 60° for the YB4409 and YB4409XL 0° to 72° for the YB4409-2 and YB4411



Anti-two block device

Standard anti-two block device, when activated, provides an audible warning to the crane operator and disengages all crane functions whose movement can cause two-blocking.



Load indicator (LSI)

A simple, effective, and easy to use load indicating system used in conjunction with the anti-two block system to assist the operator in efficient operation of the unit within the limits of the load chart. The display panel displays the hook load and warns the operator when a preset load capacity is exceeded. The warning is by a flashing light on the display panel. In conjunction with the load display panel (receiver), there is a wireless transmitter and load sensing pin attached to the boom head that transmits the hook load to the display panel.

(wireless system)



Rated Capacity Limiter (RCL)

Similar to the Load Indicator, but stops the telescope out and boom lift down function when a load limit is exceeded. Uses a similar display panel with the addition of displaying boom angle and boom length read outs on the panel.

(wireless system)



*Load Moment Indicator (LMI)

Digital display of boom angle, boom length, boom radius, capacity, and allows for operator in-put to set the limits based on load chart. Displays color coded light bar and audible alarm with function cutout if load exceeds entered parameters.

(hardwired system)



Swing

Ball bearing swing circle with 360° continuous rotation.

Hydraulic driven worm gear and pinion. Maximum speed: 2.05 rpm



Hydraulic system

YB4409 and 4409XL: (2) gear pumps

YB4409-2 and YB4411: Variable displacement piston

pump and piggyback gear pump. Combined flow: 107,9Lpm (28.5 gpm)

Maximum system operating pressure: 3600 psi

YB4409 and YB4409XL: Six section valve bank mounted in dash panel with direct mechanical linkage

for low effort lever control.

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*Denotes optional equipment



Specifications

Superstructure continued

YB4409-2 and YB4411: Six section valve bank chassis mounted; operated via dash mounted, pilot pressure hydraulic joysticks.

Return line filter with full flow by-pass protection and service indicator.

89 L (23.5 gal) hydraulic reservoir with sight level gauge and steel side plating to guard against side impact damage.



Hoist specifications

YB4409 / XL: Worm drive with counter-balance valving. Equal speed power up and down.

YB4409-2 and YB4411: Piston motor drive with spring applied/hydraulic released brake.

Drum Diameter:

YB4409 / XL: 0,24 m (9.69 in)

YB4409-2 and YB4411: 0,27 m (10.63 in)

Maximum Single Line Pull:

YB4409 / XL: 4854 kg (10,700 lb)

YB4409-2 and YB4411: 6350 kg (14,000 lb)

Maximum Single Line Speed:

YB4409 / XL: 26,8 m/min (88 fpm)

YB4409-2 and YB4411: 36,6 m/min (120 fpm)

Maximum Permissible Single Line Pull:

YB4409 / XL: 3855 kg (8,500 lb) (12,7mm [1/2 inch] Python Ultra XIPS) YB4409-2 and YB4411: 4536 kg (10,000 lb)

(14,0mm [9/16 inch] EEIPS)

Rope Length:

YB4409 / XL: (three-section boom) 29,6 m (97 ft)

(four-section boom) 39,6 m (130 ft)

YB4409-2 and YB4411: 36,6 m (120 ft)

Carrier



Frame

Grove YB4400 Series

High strength alloy steel constructed with integral outrigger housings; front and rear lifting, towing, and tie-down lugs. 42 ft.2 carrydeck size with 6350 kg (14,000 lb) carrying capacity (YB4409 / XL / YB4409-2) and 7711kg (17,000 lb) carrying capacity (YB4411). Deck coated with anti-skid treatment.

Outriggers

YB4409, YB4409XL and YB4409-2: Front and rear oblique type beams at all four corners with integral holding valves. Outrigger pads form an integral part of the beam.

YB4411: Hydraulic telescoping beam with oblique type jack provides extended and down and retracted and down lifting capacities. Integral holding valves on both beam and jack.

Padsize YB4400 Series: 18 cm x 20 cm (7.4 in x 7.8

Maximum outrigger pad load: YB4409/XL: 122 psi YB4411: 387 psi



Outrigger controls

YB4409-2, YB4409 and YB4409XL: Lever controls located on dash panel which operate the beams in pairs from side to side.

YB4411: Two switch operation mounted on dash panel. One -three- position rocker switch to select all beams/jacks, left beams/jacks only, or right beams/ jacks only. Separate -four- way toggle switch to activate beams out/in and jacks down/up. Level bubble indicator located inside operators compartment. *Independent outrigger controls available as an option.



Standard engine (Tier III)

Cummins QSB 3.3 L turbo-charged diesel rated @ 63,4 kW (85 bhp) @ 2600 rpm. Supplied with 110 V engine block heater and air intake grid heater.



*Optional engine

G.M. 3.0 L EFI dual fuel (gasoline / L.P.) rated @ 59,6 kW (80 bhp) @ 2600 rpm.



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 include a durable weather resistant seat with seat belt, hourmeter, sight level bubble, and fire extinguisher. The dash panel includes engine oil pressure gauge, engine water temperature gauge, fuel gauge, transmission low oil and high temperature warning lights, low battery warning light, and brake system low pressure warning light. The LSI (load indicator) receiver is mounted to the top of the dash and provides warning for A2B and exceeded load capacity.

*Denotes optional equipment

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Specifications



*Operators control station enclosed

Includes the standard cab shell with the addition of front and rear glass and sliding glass on the right side. Hinged full door with sliding glass.

Front windshield wiper and heater and defroster is included.



Fuel tank capacity

70 L (18.5 gallon) all steel construction with steel side plate to guard against side impact.



Electrical system

One 12V maintenance free battery, 820CCA @ 0°. Jump start connections 63 amp alternator.

I-●-I Drive

4 x 2 – Front axle drive with planetary hubs and limited slip Differential.



Steer

YB4409 / XL: two-wheel, four-wheel steer YB4409-2: two-wheel, four-wheel with crab steer YB4411: two-wheel, four-wheel, and crab steer with electronic self alignment.

Outside turning radius: YB4409 / XL / YB4409-2: Two w/s: 4,47 m (14 ft 8 in)

Four w/s: 3,10 m (10 ft 2 in)

Two w/s: 4,88 m (16 ft) Four w/s: 3,17 m (10 ft 5 in)



Transmission

YB4409 / XL and YB4409-2: Synchromesh

-four- speeds forward and reverse with stalk mounted forward/reverse selector.

YB4411: Powershift -four- speeds forward and reverse. Stalk mounted shifter on left side of steering column.



Axles

Front: Carraro planetary drive/steer with internal multi-wet-disc brakes and limited slip differential. Rear: Fabricated non-drive steer with disc brakes



Tires

10.00 x 15 14PR pneumatic



Brakes

Hydraulic actuated internal wet-disc service brakes acting on all four wheels. A dash mounted toggle switch activates the dry disc parking brake on the transmission output yoke with a dash warning light.



Suspension

Front: Rigid mounted to frame. Rear: Rigid mounted to frame



Lights

Recessed mounted, includes head, tail, rear work, stop, and turn signals.



Maximum speed

35,6 km/h (22 mph)



Gradeability (theoretical)

YB4409 / XL and YB4409-2: 57%....no load 31%.... 5443 kg (12,000 lb) load

YB4411: 68%....no load 40%.... 9072 kg (20,000 lb) load

Gross vehicle weight

YB4409: 6142 kg (13,540 lb) **YB4409XL**: 7248 kg (15,980 lb) **YB4409-2**: 7403 kg (16,320 lb) **YB4411**: 7656 kg (16,880 lb)

Miscellandous standard equipment

Single sheave, "Quick Reeve" style hookblock.; YB4409 / XL: 8,0 t (8.5 USt) YB4409-2: 8,1 t (9USt) YB4411: 10 t (10.5 USt) Back-up alarm

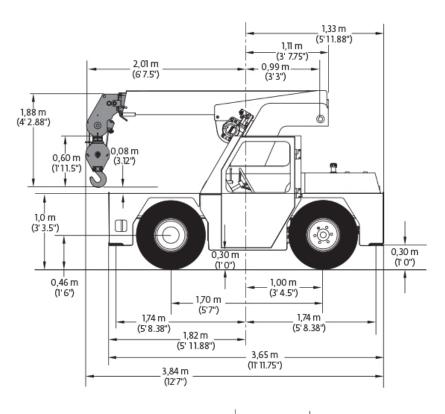
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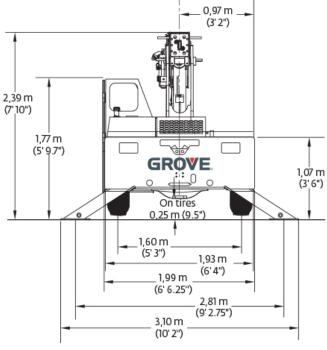
*Denotes optional equipment



Dimensions

YB4409

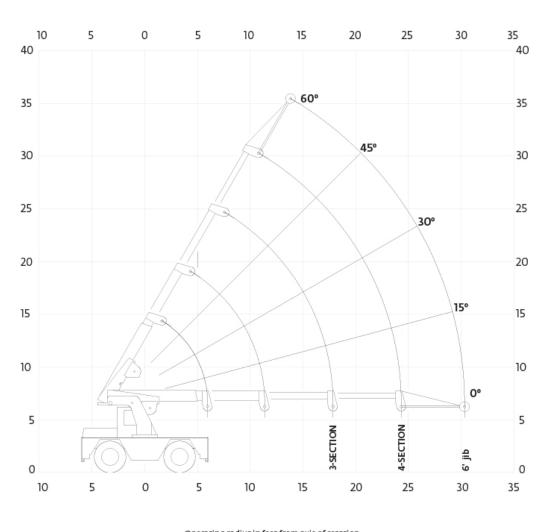




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Range diagram

YB4409



Operating radius in feet from axis of rotation

Height from the ground in feet

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

The individual cranés load chars, operating instructions and other instructional plates must be read and understood prior to operating the cr

Boom and extension length in feet



Load chart

YB4409

RADIUS	3-SECTION BOOM OR 4-SECTION BOOM WITH 4TH RETRACTED					RADIUS		ON BOOM W	ITH 4TH EXT	ENDED
(ft)		IGGERS (lb)	ON RUI	BBER (Ib)		(ft)		GGERS (lb)	ONRU	BBER (Ib)
	F/R	360°	F/R	360°			F/R	360°	F/R	360°
5.0 6.0 8.0	* 17,000 * 15,700 * 12,400	* 17,000 * 14,400 10,800	10,000 10,000 7150	10,000 7450 4400	MOORI	5.0 6.0 8.0	6100 6100 5300	6100 6100 5300	6100 6100 5300	6100 6100 5250
10.0 12.0 14.0 16.0	10,200 8500 7200 6100	7000 5400 4300	4700 3400 2650 2150	2950 2175 1700 1325	MAIN	10.0 12.0 14.0 16.0	4700 4400 4400 4400	4700 4400 4400 4400	4700 3800 2900 2325	2750 2450 1875 1525
18.0 20.0 22.0 24.5	5000 2700 2600 2200	3550 2700 2600 2200	1775 1525 1350 190	950 825 675		18.0 20.0 22.0 24.5	4400 4300 3700 3100	4100 3150 2700 2300	1900 1600 1375 1200	1225 1000 850 700
26.0 28.0 30.0 31.0	-	-	-	-	BI.	26.0 28.0 30.0 31.0	2700 2500 2300 2200	2125 1900 1700 1625	100 975 850 800	650 575 475 425

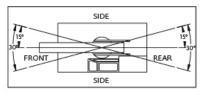
MAIN	JIB STRUCTURAL CAPACITIES (Ib)				
BOOM ANGLE (deg)	3-SECTION BOOM OR 4-SECTION BOOM WITH 4TH RETRACTED	4-SECTION BOOM WITH 4TH EXTENDED			
60	3500	3500			
55	3325	3325			
50	3150	3150			
45	3000	3000			
40	2875	2875			
35	2800	2800			
30	2700	2700			
25	2600	2600			
20	2500	2500			
15	2400	2400			
10	2325	2325			
5	2250	2250			
0	2200	2200			

NOTES:

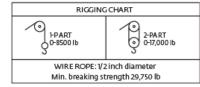
JIB CAPACITY IS LIMITED BY BOTH STRUCTURAL CAPACITY CHART AND MAIN CAPACITY CHART.

SHADED AREAS ARE GOVERNED BY STRUCTURAL STRENGTH, DO NOT RELY ON TIPPING.

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATING CHARTS AND DISREGARD OF INSTRUCTIONS IS DANGEROUS AND VOIDS WARRANTY.



REDUCTION CHART				
FROM FROM JIB RATINGS RATINGS				
MAIN BLOCK	140 lb	N/A		
HOOK & BALL	100 lb	100 lb		
JIB, STOWED	o lb	N/A		
JIB, DEPLOYED	150 lb	o lb		



- 1) The rated loads are the maximum lift capacities as determined by operating radius, boom extension and boom angle. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading, to the center of vertical hoist line or tackle with load applied.
- 2) The rated loads shown on outriggers do not exceed 85% of actual tipping. The rated loads shown on rubber do not exceed 75% of actual tipping. These ratings are based on freely suspended loads with the crane leveled, standing on a firm, uniform supporting surface. Practical working loads depend on supporting surface, operating radius and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of personnel and proper training must all be taken into account by the operator.
- 3) The weights of all load handling devices such as hooks, hookblocks, slings, etc., except the hoist rope, shall be considered part of the load. See reduction chart.

- 4) Ratings on outriggers are for either outriggers fully extended and down or fully retracted and down. Ratings for outriggers fully retracted and down will apply for any intermediate outrigger setting.
- 5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (100 psi). Loads on rubber may be transported at a maximum seed of 2.5 mph on a

smooth, hard, level surface with boom retracted to the shortest length possible and centered over front.

- 6) For operating radius not shown, use load rating of next larger radius.
- 7) The maximum combined total boom and deck load is 12,000 lb. The maximum deck load only is 14,000
- 8) Do not induce any external side loads to boom or jib.

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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.

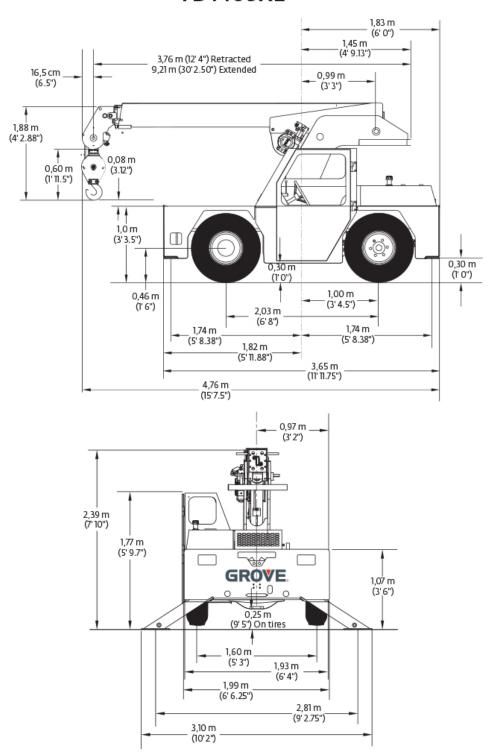
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^{*} LIMIT RATINGS TO 11,800 LB WHEN 3RD SECTION IS EXTENDED ANYAMOUNT.



Dimensions

YB4409XL



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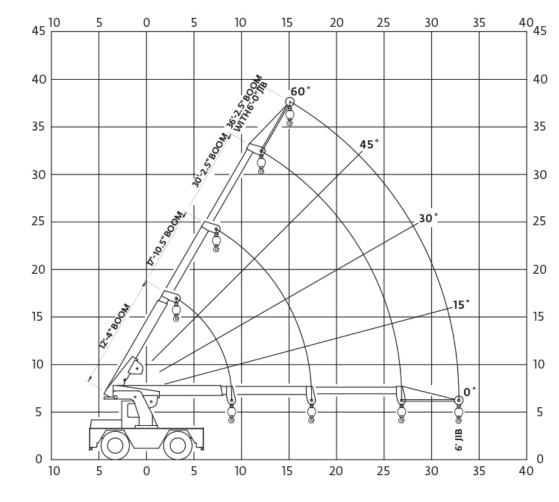
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Range diagram

YB4409XL (with three-section boom)



Height from the ground in feet

Operating radius in feet from axis of rotation

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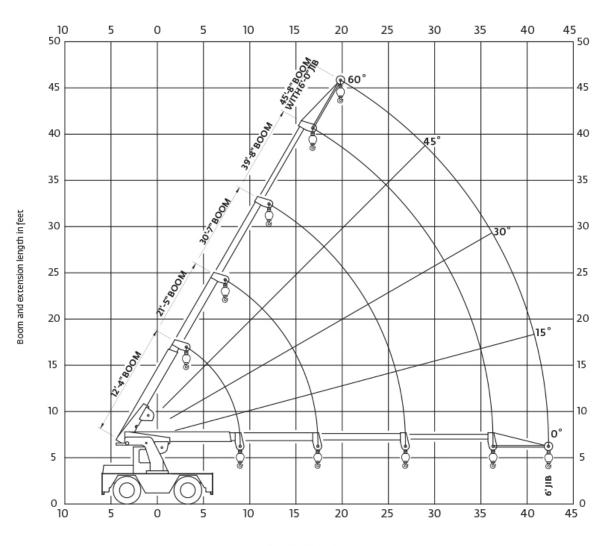
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Boom and extension length in feet



Range diagram

YB4409XL (with four-section boom)



Operating radius in feet from axis of rotation

eight from the ground in fee



Load chart

YB4409XL (three-section boom)

	3-SECTION I	TION MAIN BOOM		3-SECTION MAIN BOOM		
Radius	ON OUTRI	GGERS (Ib)	Radius ON RUBBER (I		BER (Ib)	
(ft)	F/R	360°	(ft)	F/R	360°	
5	17,000	17,000	5	10,000	10,000	
6	15,700	14,400	6	9500	8200	
8	12,400	10,800	8	7325	5125	
10	10,200	8500	10	4875	3475	
12	8500	6950	12	3550	2550	
14	7100	5800	14	2750	1925	
16	6000	4650	16	2150	1450	
18	5200	3800	18	1775	1150	
20	4450	3150	20	1450	950	
22	3800	2700	22	1225	800	
24	3300	2350	24	1025	650	
26	2900	2050	26	875	525	
27	2750	1925	27	850	475	

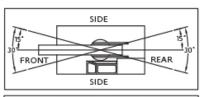
	3-SECTI	3-SECTION MAIN BOOM W/6 FT JIB DEPLOYED				
Radius	LOADED BOOM	ON OUTRI	GGERS (lb)	ON RUE	BBER (Ib)	
(ft)	ANGLE (deg)	F/R	360°	F/R	360°	
16.4	60	3500	3500	2000	1300	
18	57.5	3375	3375	1775	1150	
20	53.5	3225	3150	1450	950	
22	49	3075	2700	1225	800	
24	44.5	2950	2350	1025	650	
26	39.5	2850	2050	875	525	
28	34	2625	1825	800	425	
30	27	2400	1650	725	350	
32	16.5	2175	1475	650	300	
33.5	0	2000	1375	600	250	

NOTES:

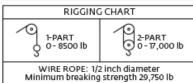
OPERATE WITH JIB BY RADIUS WHEN MAIN BOOM IS FULLY EXTENDED AND BY BOOM ANGLE WHEN MAIN BOOM IS PARTIALLY EXTENDED. DO NOT EXCEED JIB CAPACITIES AT ANY PARTIALLY EXTENDED BOOM LENGTH.

SHADED AREAS ARE GOVERNED BY STRUCTURAL STRENGTH. DO NOT RELY ON TIPPING.

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATING CHARTS AND DISREGARD OF INSTRUCTIONS IS DANGEROUS AND VOIDS WARRANTY.



REDUCTION CHART				
FROM FROM JIB RATINGS RATINGS				
MAIN BLOCK	140 lb	N/A		
HOOK & BALL	100 lb	100 lb		
JIB, STOWED	O lb	N/A		
JIB, DEPLOYED	150 lb	o Ib		



- 1) The rated loads are the maximum lifting capacities as determined by operating radius only. Any combination of boom lengths and angles may be used to obtain operating radius. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading, to the center of vertical hoist line or tackle with load applied.
- 2) The rated loads shown on outriggers do not exceed 85% of actual tipping. The rated loads shown on rubber do not exceed 75% of actual tipping. These ratings are based on freely suspended loads with the crane leveled, standing on a firm, uniform, supporting surface. Practical working loads depend on supporting surface., operating radius, and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of personnel, and proper training must all be taken into account by the operator.
- 3) The weights of all load handling devices such as hooks, hook blocks, slings, etc., except the hoist rope, shall be considered as part of the load. See reduction chart.

- Ratings on outriggers are with outriggers fully extended.
- 5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (100 psi). Loads on rubber may be transported at a maximum speed of 2.5 mph on a smooth, hard, level surface with boom retracted to the shortest length possible and centered over front.
- 6) For operating radius not shown, use load rating of next larger radius.
- 7) The maximum combined total boom and deck load is 12,000 lb. The maximum deck load only is 14,000 lb.
- Do not induce any external side loads to boom or jib.

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Grove YB4400 Series



Load chart

YB4409XL (four-section boom)

	4-SECTION MAIN BOOM W/ 4TH RETRACTED				
Radius	ON OUTRI	GGERS (lb)	ON RUB	BER (Ib)	
(ft)	F/R	360°	F/R	360°	
5	17000	17000	10000	10000	
6	15700	14400	9500	8200	
8	12400	10800	8000	5600	
10	10200	8500	5400	3800	
12	8500	6950	3800	2700	
14	7100	5800	2750	1950	
16	6000	4650	2150	1450	
18	5200	3800	1800	1150	
20	4450	3150	1500	950	
22	3800	2700	1300	775	
24	3300	2350	1100	600	
26	2900	2050	900	450	
27	2750	1925	825	375	

	4-SECTION MAIN BOOM W/ 4TH EXTENDED				
Radius	ON OUTRIC	GERS (lb)	ON RUB	BER (Ib)	
(ft)	F/R	360°	F/R	360°	
5 6 8 10 12 14 16 18 20 22 24 22 24 26 27 28 30 32 33.5 36	- 4900 4300 3800 3400 3100 2900 2900 2900 2900 2900 2900 2450 2200 1975 1775	- 4900 4300 3800 3400 2900 2900 2900 2900 2300 2150 2000 1800 1400 1250	- 4900 4300 3800 3400 2900 2400 1950 1600 1350 1100 1000 925 800 700 625 550	4900 4250 3300 2600 2100 1350 1050 850 700 650 600 500 400 325 250	

NOTES:

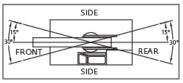
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		4-SECTION MAIN BOOM W/ 4TH RETRACTED W/ 6 FT JIB DEPLOYED			
Radius	LOADED BOOM	ON OUTRI	GGERS (lb)	ON RUB	BER (lb)
(ft)	ANGLE (deg)	F/R	360°	F/R	360°
16.4 18 20 22 24 26 28 30	60 57.5 53.5 49 44.5 39.5 34 27	3500 3375 3225 3075 2950 2850 2625 2400	3500 3375 3150 2700 2350 2050 1825 1650	2000 1800 1500 1300 1100 925 800 725	1300 1150 950 800 650 525 425 350
32 33.5	16.5 0	2175 2000	1475 1375	650 600	300 250

	4-SECTION MAIN BOOM W/ 4TH EXTENDED W/ 6 FT JIB DEPLOYED				
Radius	LOADED BOOM	ON OUTRIC	GERS (lb)	ON RUBB	ER (lb)
(ft)	ANGLE (deg)	F/R	360°	F/R	360°
22 24 26 28 30 32 33.5 36 38 40 42 43	60 57 54 50.5 47 43 40 34.5 29 22.5 11.5 0	2900 2900 2900 2750 2450 2200 1975 1775 1650 1550 1450	2900 2650 2300 2000 1800 1600 1400 1250 1150 1075 1000 950	1600 1350 1100 925 800 700 625 550 500 450 400 375	1050 850 700 600 500 400 325 250 200 150 125 100



REDUCTION CHART					
	FROM JIB RATINGS				
MAIN BLOCK	140 lb	N/A			
HOOK & BALL	100 lb	100 lb			
JIB, STOWED	0 lb	N/A			
JIB, DEPLOYED	150 lb	0 lb			



- 1) The rated loads are the maximum lifting capacities as determined by operating radius only. Any combination of boom lengths and angles may be used to obtain operating radius. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading, to the center of vertical hoist line or tackle with load applied.
- 2) The rated loads shown on outriggers do not exceed 85% of actual tipping. The rated loads shown on rubber do not exceed 75% of actual tipping. These ratings are based on freely suspended loads with the crane leveled, standing on a firm, uniform, supporting surface. Practical working loads depend on supporting surface, operating radius, and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of personnel, and proper training must all be taken into account by the operator.
- The weights of all load handling devices such as hooks, hook blocks, slings, etc., except the hoist rope, shall be considered as part of the load. See reduction chart.
- Ratings on outriggers are with outriggers fully extended.
- 5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (100 psi). Loads on rubber may be transported at a maximum speed of 2.5 mph on a smooth, hard, level surface with boom retracted to the shortest length possible and centered over front.
- For operating radius not shown, use load rating of next larger radius.
- 7) The maximum combined total boom and deck load is 12,000 lb. The maximum deck load only is 14,000 lb.
- Do not induce any external side loads to boom or jib.

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

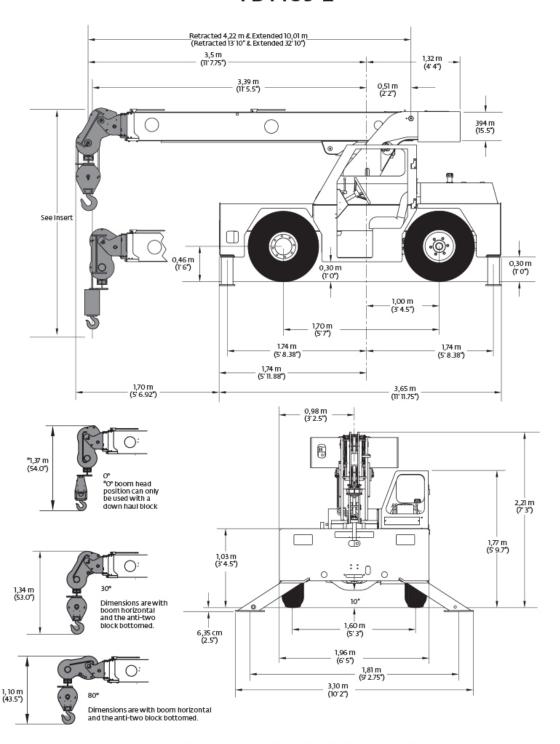
The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

14



Dimensions

YB4409-2



Grove YB4400 Series

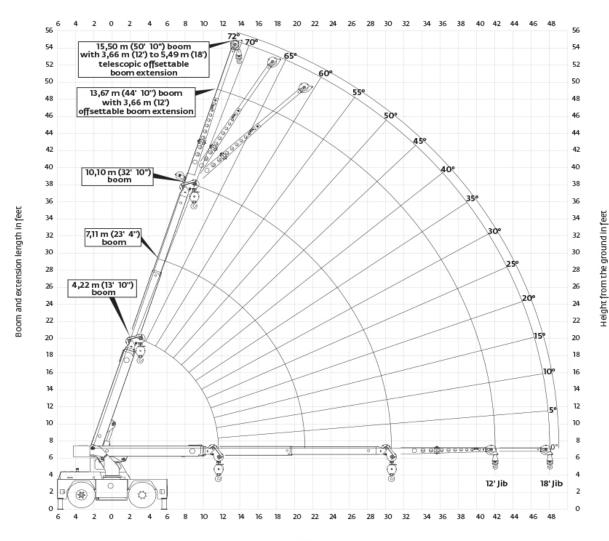
THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

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



Range diagram

YB4409-2



Operating radius in feet from axis of rotation

16

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

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



Load chart

YB4409-2

			ON OUTR		ON RUI	BBER(lb)	
	RADIUS (ft)	F	/R	36	50°	F/R	360°
		BOOM RETRACTED	BOOM EXTENDED	BOOM RETRACTED	BOOM EXTENDED	ANY BOOM	ANY BOOM
MAIN BOOM	5.0 6.0 8.0 10.0 12.0 14.0 16.0 20.0 22.0 24.0 26.0 28.0 31.0	18,000 15,700 12,200 10,200 8400 	14,700 14,400 12,200 10,200 8400 7200 6200 5400 4830 4000 3480 3020 2680 2270	18,000 15,000 11,400 9100 7600 - - - - -	14,700 14,400 11,400 9100 7600 6500 5310 4340 3610 3030 2590 2250 2010 1740	11,500 10,000 8100 5480 3920 3040 2420 1970 1640 1370 1160 990 830 650	9400 7500 5040 3530 2590 1970 1560 1250 1020 850 710 590 490 360
BIL.	34.0 36.0 38.0 40.0 42.0 44.0 46.0 48.0		1960 1770 1590 1420 1270 1200 1160		1500 1500 1350 1200 1050 930 880 820 760	510 430 350 280 210 190 170	250 180 130 80 60 40 20

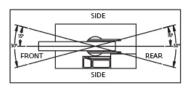
MAIN		JIB STRUCTURAL CAPACITIES (lb)								
BOOM ANGLE		12 ft JIB			18 ft JIB					
(deg)	00	15º	30°	00	15°	30°				
	OFFSET	OFFSET	OFFSET	OFFSET	OFFSET	OFFSET				
72	7500	5100	3500	4000	3300	2300				
70	7000	4800	3400	3750	3100	2200				
65	5700	4100	3100	3200	2700	2000				
60	4500	3500	2800	2800	2400	1850				
55	3500	3000	2550	2450	2150	1700				
50	2800	2500	2300	2150	1950	1600				
45	2300	2200	2000	1900	1750	1500				
40	2000	1900	1800	700	1600	1400				
35	1775	1675	1600	1525	1450	1350				
30	1600	1500	1400	1400	1300	1300				
25	1450	1400	-	1275	1200	-				
20	1350	1350	-	1175	1125	-				
15	1300	1300	-	1100	1100	-				
10	1275	-	1 -	1050	-	-				
5	1225	-	-	1025	-	-				
0	1200	-	-	1000		-				

NOTES:

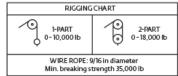
JIB CAPACITY IS LIMITED BY BOTH STRUCTURAL CAPACITY CHART AND MAIN CAPACITY CHART.

SHADED AREAS ARE GOVERNED BY STRUCTURAL STRENGTH, DO NOT RELY ON TIPPING.

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATING CHARTS AND DISREGARD OF INSTRUCTIONS IS DANGEROUS AND VOIDS WARRANTY.



REDUCTION CHART								
	FROM MAIN BOOM RATINGS	FROM MAIN JIB RATINGS						
MAIN BLOCK	140 lb	N,A						
HOOK & BALL	100 lb	1001Ь						
JIB, STOWED	0 lb	N/A						
JIB, DEPLOYED	450 lb	ОІЬ						



- 1) The rated loads are the maximum lifting capacities as determined by operating radius only. Any combination of boom lengths and angles may be used to obtain operating radius. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading, to the center of vertical hoist line or tackle with load applied.
- 2) The rated loads shown on outriggers do not exceed 85% of actual tipping. The rated loads shown on rubber do not exceed 75% of actual tipping. These ratings are based on freely suspended loads with the crane leveled, standing on a firm, uniform, supporting surface. Practical working loads depend on supporting surface., operating radius, and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of personnel, and proper training must all be taken into account by the operator.
- The weights of all load handling devices such as hooks, hook blocks, slings, etc., except the hoist rope, shall be considered as part of the load. See reduction chart.

- Ratings on outriggers are with outriggers fully extended.
- 5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (100 psi). Loads on rubber may be transported at a maximum speed of 2.5 mph on a smooth, hard, level surface with boom retracted to the shortest length possible and centered over front.
- 6) For operating radius not shown, use load rating of next larger radius.
- 7) The maximum combined total boom and deck load is 12,000 lb. The maximum deck load only is 14,000 lb.
- Do not induce any external side loads to boom or jib.

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

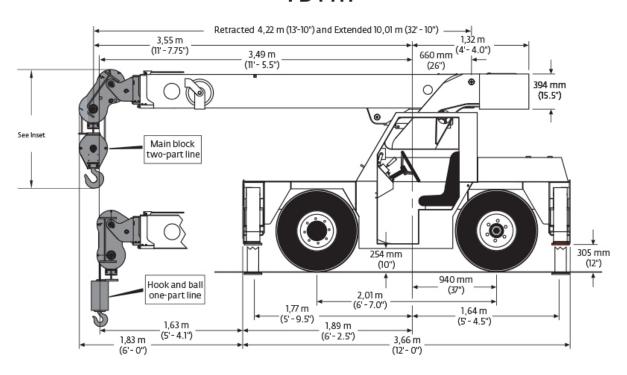
The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

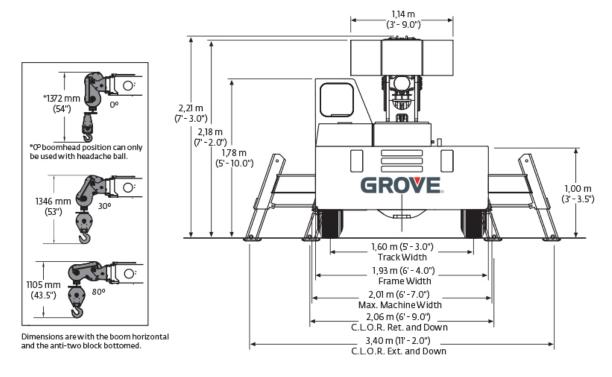
Grove YB4400 Series



Dimensions

YB4411





18

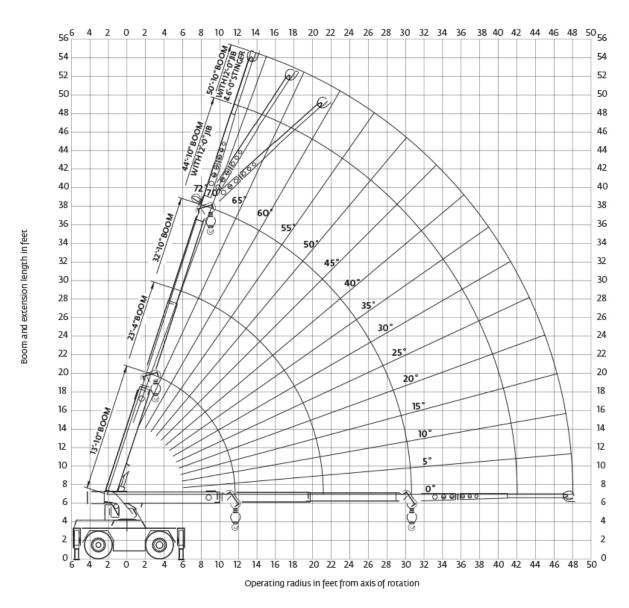
THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

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



Range diagram

YB4411



Height from the ground in feet

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

Grove YB4400 Series The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.



Load chart

YB4411

			ONOUTRIG	GERS (lb)		ON RUB	BER(Ib)
	RADIUS (ft)		D360° EDF/R	RETRAC	TED 360°	F/R	360°
	W-7	BOOM RETRACTED	BOOM EXTENDED	BOOM RETRACTED	BOOM EXTENDED	ANY BOOM	ANY BOOM
MAIN BOOM	4.0 5.0 6.0 8.0 10.0 12.0 14.0 16.0 18.0 20.0 22.0 24.0 26.0	21,000 18,000 15,700 12,200 10,200 8400	15,000 14,700 14,400 12,200 10,200 8400 7100 6000 5000 4300 3700 3300 2900	19,625 16,800 13,400 8700 6150 4550 - - - - -	13,975 13,700 13,400 8700 6150 4550 3425 2775 2300 1825 1550 1275	11,500 11,500 10,000 7600 5175 3850 3000 2400 1975 1650 1400 1200 1025	11,500 9400 7800 5600 3875 2875 2250 1800 1475 1200 1000 850 700
	28.0 31.0	-	2600 2300	-	950 800	875 700	600 450
81(34.0 36.0 38.0 40.0 42.0 44.0 46.0 48.0		1975 1775 1575 1575 1425 1300 1200 1100	-	650 550 450 350 250 200 175	600 500 400 300 200 150	350 275 200 125 - - -

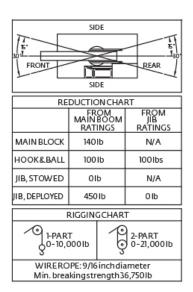
	JIB STRUCTURAL CAPACITIES (Ib)							
MAIN BOOM ANGLE		12 ft JIB		18ftJIB				
(deg)	0° OFFSET	15° OFFSET	30° OFFSET	0° OFFSET	15° OFFSET	30° OFFSET		
72	7500	5100	3500	4000	3300	2300		
70	7000	4800	3400	3750	3100	2200		
65	5700	4100	3100	3200	2700	2000		
60	4500	3500	2800	2800	2400	1850		
55	3500	3000	2550	2450	2150	1700		
50	2800	2500	2300	2150	1950	1600		
45	2300	2200	2000	1900	1750	1500		
40	2000	1900	1800	1700	1600	1400		
35	1775	1675	1600	1525	1450	1350		
30	1600	1500	1400	1400	1300	1300		
25	1450	1400		1275	1200	-		
20	1350	1350	-	1175	1125	-		
15	1300	1300	-	1100	1100	- 1		
10	1275	-	-	1050	-	-		
5	1225	-	-	1025	-	-		
0	1200	-		1000	-			

NOTES:

JIB CAPACITY IS LIMITED BY BOTH STRUCTURAL CAPACITY CHART AND MAIN CAPACITY CHART.

SHADED AREAS ARE GOVERNED BY STRUCTURAL STRENGTH, DO NOT RELY ON TIPPING.

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATING CHARTS AND DISREGARD OF INSTRUCTIONS IS DANGEROUS AND VOIDS WARRANTY.



- The rated loads are the maximum lifting capacities as determined by operating radius, boom extension and boom angle. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading to the center of vertical hoist line or tackle with load applied.
- 2) The rated loads shown on outriggers do not exceed 85% of actual tipping. The rated loads shown on rubber do not exceed 75% of actual tipping. Retracted outrigger rated loads meet ASME B30.5-2004. These ratings are based on freely suspended loads with the crane leveled, standing on a firm, uniform, supporting surface. Practical working loads depend on supporting surface, operating radius, and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of personnel, and proper training must all be taken into account by the operator.
- 3) The weights of all load handling devices such as hooks, hook blocks, slings, etc., except the hoist rope, shall be considered as part of the load. See reduction chart.

- 4) Ratings on outriggers are for either outriggers fully extended and down or fully retracted and down. Ratings for outriggers fully retracted and down will apply for any intermediate outrigger setting.
- 5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (125 psi). Loads on rubber may be transported at a maximum speed of 2.5 mph on a smooth, hard level surface with boom retracted to the shortest length possible and centered over front.
- For operating radius not shown, use load rating of next larger radius.
- 7) The maximum combined total boom and deck load is 12,000 lb. The maximum deck load only is 14,000 lb.
- 8) Do not induce any external side loads to boom or jib.

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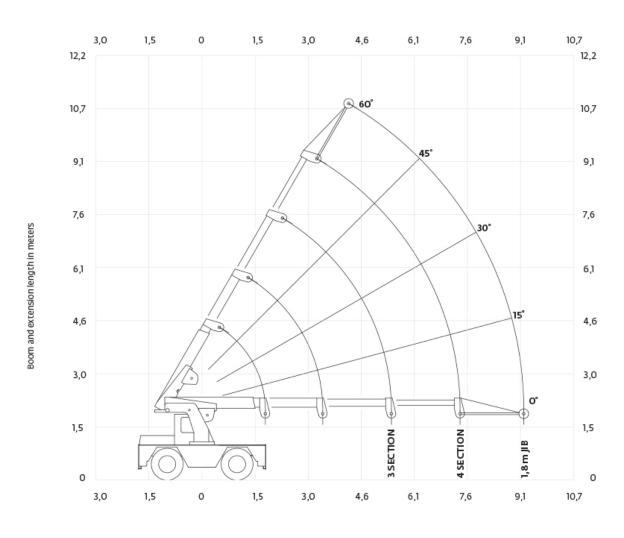
THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

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



DIN/ISO range diagram

YB4409



Height from the ground in meters

Operating radius in meters from axis of rotation

Grove YB4400 Series

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



DIN/ISO load chart

YB4409

	3-SECTION BOOM OR 4-SECTION BOOM WITH 4TH RETRACTED						4-SEC	TION BOOMW	/ITH 4TH EXTENDED		
RADIUS (m)	ON OUTRIGGERS (kg)		ON RUBBER (kg)		1	RADIUS (m)	ON OUTRI	ON OUTRIGGERS (kg)		ON RUBBER (kg)	
Ī	F/R	360"	F/R	360°	1		F/R	360°	F/R	360°	
1,5	7710	7710	4540	4380	$\overline{}$	1,5	2770	2770	2770	2770	
1,8	7120	6530	4540	3260		1,8	2770	2770	2770	2770	
2,4	5620	4900	3200	1970	l_	2,4	2400	2400	2400	2380	
3,0	4630	3900	2080	1300	BOOM	3,0	2130	2130	2130	1560	
3,7	3860	3000	1520	950	lĕ	3,7	2000	2000	1660	1080	
4,3	3270	2250	1160	730	WAIN	4,3	2000	2000	1280	820	
4,9	2580	1800	930	570	≥	4,9	2000	2000	1010	650	
5,5	2100	1470	770	460		5,5	2000	1720	820	510	
6,1	1220	1220	670	400	١	6,1	1800	1310	690	420	
6,7	1180	1120	590	340	$ \rangle$	6,7	1540	1110	590	340	
7,5	1000	930	480	260	I١	7,5	1290	940	500	270	
7,9	-	-	-	-	'	7,9	1190	870	460	250	
8,5	-	-	-			8,5	1080	780	410	210	
9,1	-	-	-	-	Щ	9,1	970	690	350	770	
9,4	-	-	-			9,4	920	660	330	150	

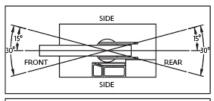
MAIN	JIB STRUCTURAL CAPACITIES (kg)					
BOOM ANGLE (deg)	3-SECTION BOOM OR 4-SECTION BOOM WITH 4TH RETRACTED	4-SECTION BOOM WITH 4TH EXTENDED				
60	1590	1588				
55	1510	1508				
50	1430	1429				
45	1360	1361				
40	1305	1304				
35	1270	1270				
30	1225	1225				
25	1180	1179				
20	1135	1134				
15	1090	1089				
10	1055	1055				
5	1020	1021				
0	1000	998				

NOTES:

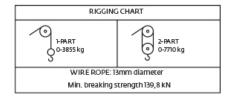
JIB CAPACITY IS LIMITED BY BOTH STRUCTURAL CAPACITY CHART AND MAIN CAPACITY CHART.

SHADED AREAS ARE GOVERNED BY STRUCTURAL STRENGTH, DO NOT RELY ON TIPPING.

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATING CHARTS AND DISREGARD OF INSTRUCTIONS IS DANGEROUS AND VOIDS WARRANTY.



REDUCTION CHART							
	FROM MAIN BOOM RATINGS	FROM JIB RATINGS					
MAIN BLOCK	64 kg	N/A					
HOOK & BALL	45 kg	45 kg					
JIB, STOWED	0 kg	N/A					
JIB, DEPLOYED	68 kg	0 kg					



- 1) The rated loads are the maximum lifting capacities as determined by operating radius only. Any combination of boom lengths and angles may be used to obtain operating radius. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading, to the center of vertical hoist line or tackle with load applied.
- 2) The rated loads shown on outriggers do not exceed 80% of actual tipping. The rated loads shown on rubber do not exceed 75% of actual tipping. These ratings are based on freely suspended loads with the crane leveled, standing on a firm, uniform, supporting surface. Practical working loads depend on supporting surface, operating radius, and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of operator, and proper training must all be taken into account by the operator.
- 3) The weights of all load handling devices such as hooks, hook blocks, slings, etc., except the hoist rope, shall be considered as part of the load. See reduction chart.

- Ratings on outriggers are with outriggers fully extended.
- 5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (6,9 bar). Loads on rubber may be transported at a maximum speed of 4 km/h on a smooth, hard, level surface with boom retracted to the shortest length possible and centered over front.
- For operating radius not shown, use load rating of next larger radius.
- 7) The maximum combined total boom and deck load is 5440 kg. The maximum deck load only is 6350 kg.
- Do not induce any external side loads to boom or jib.

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

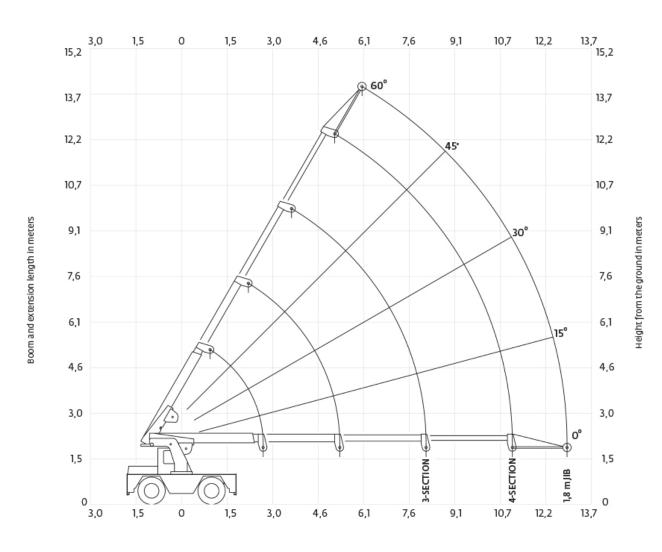
The individual crane's load chars, operating instructions and other instructional plates must be read and understood prior to operating the crane.

^{*}LIMIT RATINGS TO 5350 kg WHEN 3RD SECTION IS EXTENDED ANYAMOUNT.



DIN/ISO range diagram

YB4409XL



Operating radius in meters from axis of rotation

Grove YB4400 Series

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



DIN/ISO load chart

YB4409XL

RADIUS	4-SECTIO	3-SECTION ON BOOM WI		RACTED		RADIUS		4-SECTION BOOM WITH 4TH EXTENDED		
(m)	ON OUTRIGGERS (kg)		ON RUB	BER (kg)		(m)	ONOUTRI	GGERS (kg)	ONRUB	BER (kg)
	F/R	360'	f/R	360'			f/R	360°	F/R	360"
1,5	7710	7710	4535	4535		1,5	-	-	-	-
1,8	7120	6530	4310	3720	l	1,8	-	-	-	-
2,4	5625	4900	3580	2490	l	2,4	2225	2225	2225	2225
3,0	4625	3855	2400	1670	l	3,0	1950	1950	1950	1880
3,7	3855	3150	1670	1170	5	3,7	1725	1725	1725	1450
4,3	3220	2550	1200	830	BOOM	4,3	1540	1540	1540	1130
4,9	2720	1930	930	610	22	4,9	1405	1405	1270	900
5,5	2360	1570	770	470	MAIN	5,5	1315	1315	1040	720
6,1	1850	1290	630	380	l≨	6,1	1315	1315	830	560
6,7	1570	1100	540	310		6,7	1315	1315	680	430
7,3	1360	950	450	240	l	7,3	1315	1080	560	340
7,9	1180	820	370	190	l	7,9	1315	930	450	270
8,2	1120	770	340	170		8,2	1200	860	400	240
8,5	1070	730	310	140	Λ	8,5	1120	800	370	220
9,1	970	650	280	110	I۱	9,1	990	710	310	180
9,8	880	580	240	90	I١	9,8	890	630	270	130
10,2	800	530	220	60	I١	10,2	790	540	230	100
п,о	-	-	-	-	I۱	11,0	700	480	200	60
11,6	-	-	-	-		11,6	650	440	180	40
12,2	-	-	-	-	黑	12,2	610	410	150	20
12,8	-	-	-	-	_	12,8	570	370	130	10
13,1	-	-	-	-		13,1	540	350	120	0

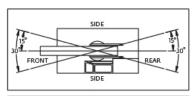
MAIN	JIB STRUCTURAL CAPACITIES (kg)					
BOOM ANGLE (deg)	3-SECTION BOOM OR 4-SECTION BOOM WITH 4TH RETRACTED	4-SECTION BOOM WITH 4TH EXTENDED				
60	1590	1540				
55	1510	1405				
50	1430	1295				
45	1360	1180				
40	1305	1100				
35	1270	1045				
30	1225	1000				
25	1180	975				
20	T135	965				
15	1090	955				
10	1055	930				
5	1020	920				
0	1000	905				

NOTES:

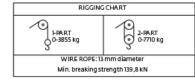
JIB CAPACITY IS LIMITED BY BOTH STRUCTURAL CAPACITY CHART AND MAIN CAPACITY CHART.

SHADED AREAS ARE GOVERNED BY STRUCTURAL STRENGTH. DO NOT RELY ON TIPPING.

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATING CHARTS AND DISREGARD OF INSTRUCTIONS IS DANGEROUS AND VOIDS WARRANTY.



REDUCTION CHART								
FROM FROM MAIN BOOM JIB RATINGS RATINGS								
MAIN BLOCK	64 kg	N/A						
HOOK & BALL	45 kg	45 kg						
JIB, STOWED	Okg	N/A						
JIB, DEPLOYED	68 kg	0 kg						



- 1) The rated loads are the maximum lifting capacities as determined by operating radius only. Any combination of boom lengths and angles may be used to obtain operating radius. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading, to the center of vertical hoist line or tackle with load applied.
- 2) The rated loads shown on outriggers do not exceed 80% of actual tipping. The rated loads shown on rubber do not exceed 75% of actual tipping. These ratings are based on freely suspended loads with the crane leveled, standing on a firm, uniform, supporting surface. Practical working loads depend on supporting surface, operating radius, and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of operator, and proper training must all be taken into account by the operator.
- 3) The weights of all load handling devices such as hooks, hook blocks, slings, etc., except the hoist rope, shall be considered as part of the load. See reduction chart.

- Ratings on outriggers are with outriggers fully extended.
- 5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (6,9 bar). Loads on rubber may be transported at a maximum speed of 4 km/h on a smooth, hard, level surface with boom retracted to the shortest length possible and centered over front.
- For operating radius not shown, use load rating of next larger radius.
- 7) The maximum combined total boom and deck load is 5443 kg. The maximum deck load only is 6350 kg.
- Do not induce any external side loads to boom or jib.

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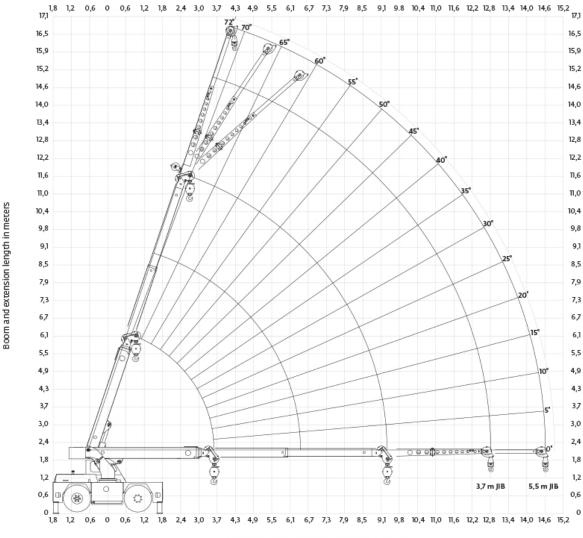
THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

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

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DIN/ISO range diagram

YB4409-2



Operating radius in meters from axis of rotation

eight from the ground in meters



DIN/ISO load chart

YB4409-2

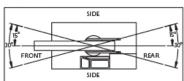
				ON OUTRI	GGERS (kg)		ON RUB	BER (kg)
		RADIUS (m)		R	36	io°	f/R	360°
		. ,	BOOM RETRACTED	BOOM EXTENDED	BOOM RETRACTED	BOOM EXTENDED	ANY BOOM	ANY BOOM
Γ		1,5	8160	6670	8160	6670	5220	4260
ı		1,8	7120	6530	6800	6530	4540	3360
ı		2,4	5530	5530	5170	5170	3670	2240
ı		3,0	4630	4630	4130	4130	2440	1550
ı	Σ	3,7	3810	3810	3450	3450	1730	П30
ı	MAIN BOOM	4,3	-	3270	-	2800	1330	840
ı	30	4,9	-	2810	-	2220	1050	660
ı	¥	5,5	-	2450	-	1800	850	520
ı	Σ	6,1	-	2010	-	1490	700	420
ı		6,7	-	1670	-	1250	570	340
ı		7,3	-	1430	-	1060	480	280
ı		7,9	-	1240	-	910	400	220
ı		8,5	-	1090	-	810	330	170
L		9,4	-	920	-	690	250	120
Γ		10,4	-	780	-	590	180	70
ı		11,0	-	710	-	530	150	40
ı		11,6	-	630	-	460	по	10
ı	m	12,2	-	560	-	400	80	0
1	≘	12,8	-	490	-	350	50	0
1		13,4	-	460	-	320	40	0
1		14,0	-	440	-	300	30	0
L		14,6	-	430	-	270	20	0

	JIB STRUCTURAL CAPACITIES (kg)						
MAIN BOOM ANGLE	3,7 m JIB			5,5 m JIB			
(deg)	o°	15°	30°	o°	15°	30°	
\3/	OFFSET	OFFSET	OFFSET	OFFSET	OFFSET	OFFSET	
72	3400	2310	1590	1810	1500	1040	
70	3180	2180	1540	1700	1410	1000	
65	2590	1860	1410	1450	1220	910	
60	2040	1590	1270	1270	1090	840	
55	1590	1360	1160	1110	980	770	
50	1270	1130	1040	980	880	730	
45	1040	1000	910	860	790	680	
40	910	860	820	770	730	640	
35	810	760	730	690	660	610	
30	730	680	640	640	590	590	
25	660	640	-	580	540	-	
20	610	610	-	530	510	-	
15	590	590	-	500	500	-	
10	580	-	-	480	-	-	
5	560	-	-	460	-	-	
0	540	-	-	450	-	-	

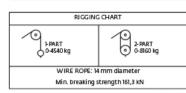
JIB CAPACITY IS LIMITED BY BOTH STRUCTURAL CAPACITY CHART AND MAIN CAPACITY CHART.

SHADED AREAS ARE GOVERNED BY STRUCTURAL STRENGTH, DO NOT RELY ON TIPPING.

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATING CHARTS AND DISREGARD OF INSTRUCTIONS IS DANGEROUS AND VOIDS WARRANTY.



REDUCTION CHART				
	FROM MAIN BOOM RATINGS	FROM JIB RATINGS		
MAIN BLOCK	60 kg	N/A		
HOOK & BALL	45 kg	45 kg		
JIB, STOWED	0 kg	N/A		
JIB, DEPLOYED	200 kg	0 kg		



- 1) The rated loads are the maximum lifting capacities as determined by operating radius, boom extension and boom angle. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading to the center of vertical hoist line or tackle with load
- 2) The rated loads shown on outriggers do not exceed 80% of actual tipping. The rated loads shown on rubber do not exceed 75% of actual tipping. These ratings are based on freely suspended loads with the crane leveled, standing on a firm, uniform, supporting surface. Practical working loads depend on supporting surface, operating radius, and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of personnel, and proper training must all be taken into account by the operator.
- 3) The weights of all load handling devices such as hooks, hook blocks, slings, etc., except the hoist rope, shall be considered as part of the load. See reduction chart.

- 4) Ratings on outriggers are for outriggers fully extended.
- 5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (700 kPA). Loads on rubber may be transported at a maximum speed of 1,4 km/h on a smooth, hard level surface with boom retracted to the shortest length possible and centered over front.
- 6) For operating radius not shown, use load rating of next larger radius.
- 7) The maximum combined total boom and deck load is 5440 kg. The maximum deck load only is 6350 kg.
- 8) Do not induce any external side loads to boom or jib.

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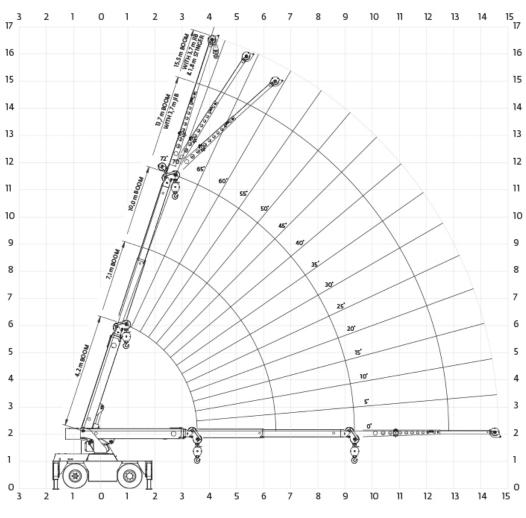
THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE. The individual cranés load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

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DIN/ISO range diagram

YB4411



Height from the ground in meters

Operating radius in meters from axis of rotation

Boom and extension length in meters



DIN/ISO load chart

YB4411

		ON OUTRIGGERS (kg)				ON RUBBER (kg)	
	RADIUS (m)	EXTENDED 360° RETRACTED F/R		RETRACTED 360°		F/R	360"
		BOOM RETRACTED	BOOM EXTENDED	BOOM RETRACTED	BOOM EXTENDED	ANY BOOM	ANY BOOM
	1,2	9530	6800	9530	6800	5220	5220
	1,5	8160	6670	8160	6670	5220	4260
	1,8	7120	6530	6530	6530	4540	3540
	2,4	5530	5530	3960	3960	3670	2680
	3,0	4630	4630	2810	2810	2720	1810
_ ≥	3,7	3810	3810	2090	2090	2040	1310
MAIN BOOM	4,3	-	3220	- 1	1570	1590	1040
<u> </u>	4,9	-	2720	-	1270	1270	820
\{	5,5	-	2270	-	1060	1040	680
≥	6,1	-	1790	-	850	860	540
	6,7	-	1530	-	720	730	430
	7,3	-	1360	-	590	630	380
	7,9	-	1190	-	510	540	320
	8,5	-	1060	-	440	480	270
	9,4	-	930	-	380	360	180
	10,4	-	790	-	310	270	110
	11,0	-	710	-	270	230	80
BI	11,6	-	620	-	220	180	40
	12,2	-	560	-	180	150	10
	12,8	-	510	-	130	110	0
	13,4	-	460	-	110	90	0
	14,0	-	420	-	90	80	0
	14,6	-	380	-	80	70	0

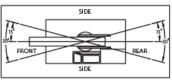
	JIB STRUCTURAL CAPACITIES (kg)					
MAIN BOOM ANGLE	3,7 m JIB			5,5 m JIB		
(deg)	0° OFFSET	15' OFFSET	30° OFFSET	o" OFFSET	15° OFFSET	30° OFFSET
72	3400	2310	1590	1810	1500	1040
70	3180	2180	1540	1700	1410	1000
65	2590	1860	1410	1450	1220	910
60	2040	1590	1270	1270	1090	840
55	1590	1360	1160	1110	980	770
50	1270	1130	1040	980	880	730
45	1040	1000	910	860	790	680
40	910	860	820	770	730	640
35	810	760	730	690	660	610
30	730	680	640	640	590	590
25	660	640	-	580	540	-
20	610	610	-	530	510	-
15	590	590	-	500	500	-
10	580	-	-	480	-	-
5	560	-	-	460	-	-
0	540	-	-	450	-	-

NOTES:

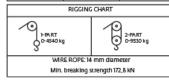
JIB CAPACITY IS LIMITED BY BOTH STRUCTURAL CAPACITY CHART AND MAIN CAPACITY CHART.

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OPERATION OF THIS EQUIPMENT IN EXCESS OF RATING CHARTS AND DISREGARD OF INSTRUCTIONS IS DANGEROUS AND VOIDS WARRANTY.



REDUCTION CHART				
	FROM MAIN BOOM RATINGS	FROM JIB RATINGS		
MAIN BLOCK	60 kg	N/A		
HOOK & BALL	45 kg	45 kg		
JIB, STOWED	0 kg	N/A		
JIB, DEPLOYED	200 kg	0 kg		



- 1) The rated loads are the maximum lifting capacities as determined by operating radius only. Any combination of boom lengths and angles may be used to obtain operating radius. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading, to the center of vertical hoist line or tackle with load applied.
- 2) The rated loads shown on outriggers do not exceed 80% of actual tipping. The rated loads shown on rubber do not exceed 75% of actual tipping. These ratings are based on freely suspended loads with the crane leveled, standing on a firm, uniform, supporting surface. Practical working loads depend on supporting surface, operating radius, and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of operator, and proper training must all be taken into account by the operator.
- The weights of all load handling devices such as hooks, hook blocks, slings, etc., excpet the hoist rope, shall be considered as part of the load. See reduction chart.

- Ratings on outriggers are with outriggers fully extended.
- 5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (6,9 bar). Loads on rubber may be transported at a maximum speed of 4 km/h on a smooth, hard level surface with boom retracted to the shortest length possible and centered over front.
- For operating radius not shown, use load rating of next larger radius.
- 7) The maximum combined total boom and deck load is 5440 kg. The maximum deck load only is 6350 kg.
- 8) Do not induce any external side loads to boom or jib.

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

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



Notes

Grove YB4400 Series 29



Notes



Notes

Grove YB4400 Series 31



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