

Grove GMK6350L

Preliminary Product Guide



Features

- 15,6 m 80 m (51 ft 263 ft) seven-section full power MEGAFORM™ boom with TWIN-LOCK™ pinning
- 12 m 21 m (39 ft 69 ft) hydraulic offset bi-fold swingaway
- 1 x 8 m (26 ft) intermediate lattice insert
- 92,5 t (203,900 lb) counterweight with hydraulic removal system
- MEGATRAK™ independent hydro-pneumatic suspension

Features

Introducing the Grove GMK6350L

MEGATRAK™

The MEGATRAK™ suspension system is the best off road driveline available on the market today. The system's versatility and performance allows the GMK6350L to operate as a true all-terrain crane. The MEGATRAK™ independent suspension and all-wheel steer system allows wheels to remain on the ground at all times so stresses and weight are not continually transferred between axles. MEGATRAK™ provides true ground clearance where others just raise the chassis.

Other benefits of the MEGATRAK™ system are:

- A reliable suspension system
- Excellent job site maneuverability with all-wheel steering
- Commonality among almost all models
- A driveline that remains aligned at all times
- A steering linkage system that is protected against damage
- Constant tire contact for equal tire wear
- Reduced maintenance



TWIN-LOCK™

Boom pinning mechanism automatically pins the sections in position using two horizontal pins.







ECOS.

ECOS

Electronic Crane Operating System - ECOS enables control of the entire crane's principle operations. Simple programming eases lift planning and a supply of essential information allows full concentration on the lift itself.



EKS 5

The EKS 5 monitors the lifting conditions of the crane at all times and provides a full graphic display, rear lighting, graphic of boom telescoping percentage, and load charts.



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Specifications

Superstructure



Boom

15,6 m - 80 m (51 ft - 263 ft) 7-section, full power MEGAFORM™ boom with TWIN-LOCK™ Pinning. Maximum tip height: 83 m (272 ft).



Boom nose

Nine nylatron sheaves, mounted on heavy duty tapered roller bearings with removable pin-type rope guards. Quick reeve boom nose. Removable auxiliary boom nose with removable pin type rope guard.



Boom elevation

Single lift cylinder with safety valve provides boom angle from -1.5° to +83°.



*Hydraulic offsettable lattice extension

12 m - 21 m (39 ft – 69 ft) bi-fold lattice swingaway extension, hydraulically offsettable and luffing under load, 5°- 40°.

Maximum tip height: 104 m (341 ft)



*Lattice insert

 $1 \times 8 \text{ m}$ (26 ft) insert for use with lattice swingaway extension to increase length to 29 m (95 ft). Maximum tip height: 112 m (367 ft)



Load moment and anti-two block system

Load moment and anti-two block system with audio/ visual warning and control lever lockout provides electronic display of boom angle, length, radius, tip height, relative load moment, maximum permissible load, load indication and warning of impending two-block condition.



Cab

All aluminum constructed cab with acoustical lining, hydraulic tilted to 20°. Includes tinted safety glass, adjustable operator's seat, opening windows at side and rear, hinged windshield with wiper, sun visor and window shade. Other features include hot water heater/defroster, armrest integrated crane controls, ergonomically arranged instrumentation and radio/cd player.



Swing

3 planetary gear boxes with fixed displacement axial piston motors. Infinitely variable to 1.3 rpm. Free swing or hydrostatically engaged brake controlled by swing lever. Swing brake selected by foot operated switch.



Counterweight

92,5 t (203,900 lb) consisting of various sections with hydraulic installation/removal system controlled from the superstructure cab.



Engine

Mercedes OM 926 LA six-cylinder

Horsepower: 210 kW (286 bhp) at 2200 rpm Torque: 1120 Nm (826 ft/lb) at 1400 rpm

Engine emissions: EPA/CARB/EUROMOT (off road)



Fuel tank capacity

300 L (79 gal)



Electrical system

3 phase alternator: 28V/80A 2 batteries: 12V/170Ah



Hydraulic system

2 (two) separate circuits, 1 (one) axial piston variable displacement pump (load sensing) with electronic power limiting control for crane functions and 1 (one) double gear pump for slewing. Thermostatically controlled oil coolers keep oil at optimum operating temperature.

Hydraulic tank capacity: 1200 L (317 gal)

Specifications

Superstructure continued



Hoist

Main and auxiliary hoist are powered by axial piston motor with planetary gear and brake. "Thumb-thumper" hoist drum rotation indicator alerts operator of hoist movement.

	Main	Auxiliary
Rope length:	350 m	350 m
	(1148 ft)	(1148 ft)
Rope diameter:	22 mm	22 mm
Line speed:	127 m/min	127 m/min
	(417 fpm)	(417 fpm)
T. 11	00.5137	00 5137
Line pull:	93.5 kN	93.5 kN
	(21,020 lb)	(21,020 lb)

Hoist camera and light included.

*Optional equipment

- Work lights, mounted on boom base section
- Boom mounted aircraft warning light
- Air conditioning
- Hook blocks/headache ball
- Engine independent diesel cab heater, with engine pre-heater. Includes 24 hour timer.
- Data logger
- → 360° NYC swing lock
- 2,3 m (7.5 ft) side stowed heavy duty jib with 38 t (83,000 lb) maximum capacity using four parts of line, offset 8° and 30°
- Camera for boom head

Carrier



Chassis

Box type, torsion resistant frame is fabricated from high strength steel.



Outrigger system

Four hydraulic two stage outrigger beams with vertical cylinders and outrigger pads, 700 mm (27.6 in) round. Outrigger can be set in 5 positions:

Full: 8,5 m (27.9 ft)
Partial: 7,4 m (24.3 ft)
Partial: 6,3 m (20.7 ft)
Partial: 5,0 m (16.4 ft)
Retracted: 2,7 m (9.0 ft)

Independent horizontal and vertical movement controlled from each side of carrier and the superstructure cab. Electronic crane level indicators. Hydraulic disconnect for all outrigger beams. Work light for each outrigger beam and outrigger pad load indicator with read out on both sides of carrier and in superstructure cabin.



Transmission

Allison automatic 4500 SP, 6 speeds forward, 1 reverse 2 speed transfer case



Drive/steer

12x6x12



Axles

1st axle line - drive/steer

2nd axle line - steer

3rd axle line - steer (connects for all wheel steer)

4th axle line – drive/steer (connects for all wheel steer)

5th axle line – drive/steer (permanent drive with 12x6, disconnects for highway with 12x8)

6th axle line – steer (optional drive)

Drive axles with planetary hub reduction and center mounted gearing. Standard inter-axle and cross axle differential locks.

Specifications

Carrier continued



Suspension

Grove exclusive MEGATRAK™ suspension. Independent hydro-pneumatic system acting on all wheels with hydraulic lockout. Suspension can be raised 170 mm (6.7 in) or lowered 126 mm (5.0 in), both longitudinally and transversely. Features an automatic leveling system for highway travel.



Tires

12 tires, 16.00R25 (Vehicle width - 3,0 m [9.8 ft])



Steering

Dual circuit, hydraulic power assisted steering system. Transfer case mounted, ground driven emergency steering pump. Axles 1, 2, 5 and 6 steer on highway. Separate steering (steer by wire) of the 3rd to 6th axles for all wheel and crab steering, controlled by an electronic rocker switch.



Engine

Mercedes OM 502 LA, eight-cylinder

Horsepower: $405\ kW$ (551 bhp) at 2100 rpm

Torque: 2600 Nm (1918 ft/lb) at 1300 rpm

Engine emissions: EPA /CARB/EUROMOT (off road)



Fuel tank capacity

500 L (132 gal). Installed on superstructure.



Brakes

Service brakes: pneumatic dual circuit acting on all wheels. Parking brake: pneumatically operated spring loaded brake acting on axle lines 2, 4, 5 and 6.

Air dryer.



Cab

Two-man, composite designed aluminum and fiber reinforced plastic construction with the following features: safety glass, driver seat with pneumatic suspension, engine-dependent hot water heater, power windows, heated rear view mirrors, complete instrumentation, driving controls, reversing camera system, air conditioning, radio/cd player, 12V plug and fire extinguisher.



Electrical system

24V system with three phase alternator, 28V/100A 2 batteries, 12V/170 Ah



Maximum speed

85 km/h (53 mph)



Gradeability (theoretical)

49% - 14.00 tires

43% - 16.00/20.5 tires

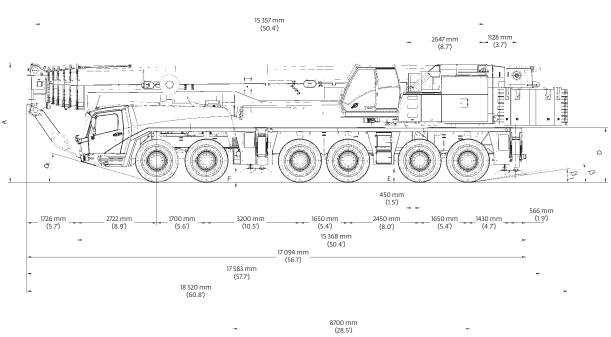
Miscellaneous standard equipment

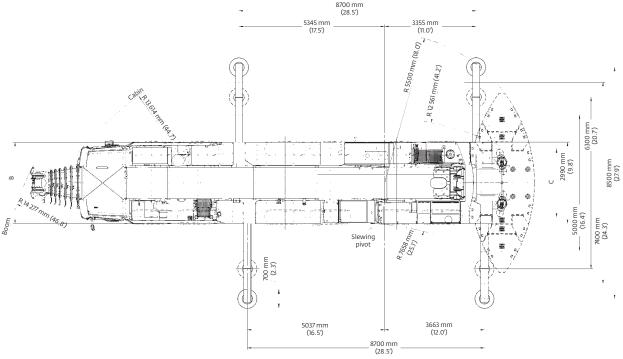
Work lights; tool kit, fire extinguishers; auxiliary boom nose, and wind speed indicator.

*Optional equipment

- 14.00R25 tires (vehicle width. 3,0 m [9.8 ft])
- 20.5R25 tires (vehicle width. 3,1 m [10.2 ft])
- 12x8x12 drive/steer
- Transmission retarder
- Engine independent diesel cab heater, with engine pre-heater. Includes 24 hour timer.
- Spare tire and wheel with carry bracket
- Rear mounted stowage box
- Trailer hitch
- Outrigger length sensors

Dimensions



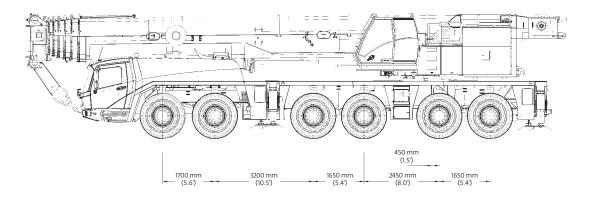


Tires	А	A *130 mm (0.4*)	В	С	D	E	F	α	β	β1
14.00 R25	3950 mm (13.0')	3820 mm (12.5')	2970 mm (9.7')	2570 mm (8.4')	1822 mm (6.0')	400 mm (1.3')	297 mm (1.0')	14°	8°	6°
16.00 R25	4000 mm (13.1')	3870 mm (12.7')	2975 mm (9.8')	2510 mm (8.2')	1872 mm (6.1')	450 mm (1.5')	327 mm (1.1')	16°	10°	8°
20.5 R25	4000 mm (13.1')	3870 mm (12.7')	3070 mm (10.1')	2530 mm (8.3')	1872 mm (6.1')	450 mm (1.5')	327 mm (1.1')	16°	10°	8°

Ra = Radius all wheels steered *Lowered

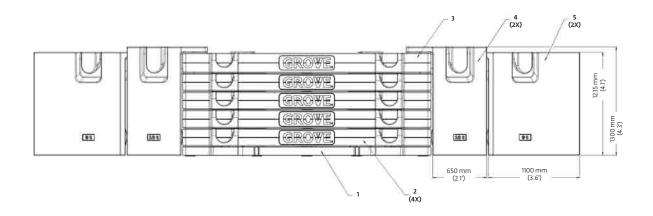
Weights

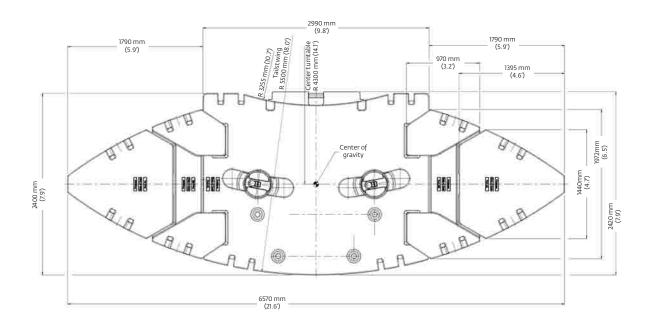
Boom over front



Basic Weights - kg (lb)	Axles	1 and 2	Axle	s 3 - 6	То	otal
Mercedes power, 16.00R25 tires, 12x6x12 drive/steer, 2nd oil cooler, outrigger pads, driver and tanks filled	22 927	(50,545)	48 993	(108,011)	71 920	(158,556)
Additions:						
12x8x12 drive/steer	- 222	(-489)	612	(1349)	390	(860)
Spare wheel 14.00 R25 XGC steel rim with stowage	-199	(-439)	464	(1023)	265	(584)
Spare wheel 16.00 R25 XGC steel rim with stowage	- 244	(-538)	569	(1254)	325	(717)
Spare wheel 20.5 R25 XGC steel rim with stowage	- 278	(-613)	645	(1422)	367	(809)
Brackets for hydraulic swingaway	100	(220)	0	(0)	100	(220)
Hose reel + parts for hydraulic swingaway	110	(243)	120	(265)	230	(507)
11 m - 18 m (36 ft - 59 ft) hydraulic swingaway	2525	(5567)	- 515	(-1135)	2010	(4431)
Auxiliary hoist	-2509	(-5,531)	5269	(11,616)	2760	(6085)
7000 kg (15,400 lb) base plate stowed on carrier	3662	(8073)	3338	(7359)	7000	(15,432)
9500 kg (20,900 lb) slab on top of base plate stowed on carrier	4970	(10,957)	4530	(9987)	9500	(20,944)
Substitutions:						
14.00R25 tires	- 240	(-529)	- 480	(-1058)	- 720	(-1587)
20.5R25 tires	168	(370)	336	(741)	504	(1111)
Removals:						
Boom assembly without lift cylinder	-17 034	(-37,554)	-10 499	(-23,146)	-27 533	(-60,700)
Front outriggers	-1655	(-3649)	- 890	(-1962)	-2545	(-5611)
Rear outriggers	1842	(4061)	-4675	(-10,307)	-2833	(-6246)
Front and rear outrigger floats	0	(0)	- 350	(-772)	- 350	(-772)

Counterweight

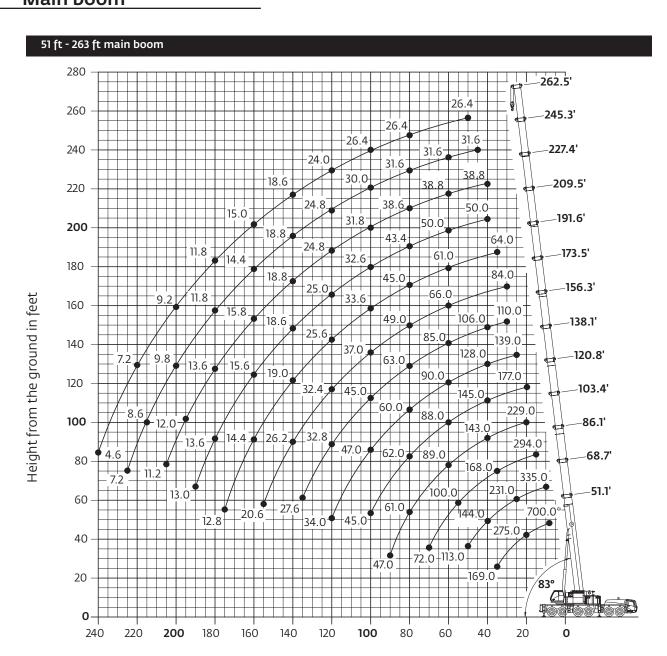




	1 7,0 t (15,430 lb)	9,5 t (20,940 lb)	3 9,5 t (20,940 lb)	4 10,0 t (22,050 lb)	5 9,0 t (19,840 lb)
7,0 t (15,400 lb)	Х	-	-	-	-
16,5 t (36,400 lb)	Х	Х	-	-	-
26,0 t (57,300 lb)	Х	2 X	-	-	-
35,5 t (78,300 lb)	Х	3 X	-	-	-
45,0 t (99,200 lb)	Х	4 X	-	-	-
54,5 t (120,200 lb)	Х	4 X	Х	-	-
74,5 t (164,200 lb)	Х	4 X	Х	2 X	-
92,5 t (203,900 lb)	Х	4 X	X	2 X	2 X

Grove GMK6350L

Working range



Operating radius in feet from axis of rotation

Hook heights shown in the working diagram do not consider loaded boom deflection.

	Hook block	н
(i)	200 ton, 9 sheave	12.0 ft (3650 mm)
	160 ton, 7 sheave	12.0 ft (3650 mm)
	125 ton, 5 sheave	10.8 ft (3300 mm)
	80 ton, 3 sheave	10.8 ft (3300 mm)
 - -	32 ton, 1 sheave	10.5 ft (3200 mm)
	12 ton, single line headache ball	8.0 ft (2450 mm)

Main boom







15,6 m - 80 m 92 500 kg 26 ft 7 in spread (51.1 ft - 262.5 ft) (203,900 lb) (100%)

							Pounds x 1	000					
ٔ رق													
Feet	51.1'	68.7'	86.1'	103.4'	120.8'	138.1'	156.3'	173.5'	191.6'	209.5'	227.4'	245.3'	262.5'
8.0	700.0*												
10.0	416.0	335.0	204.0										
15.0	336.0	316.0	294.0	220.0	177.0								
20.0	275.0	271.0	256.0	229.0	177.0	120.0							
25.0 30.0	232.0 199.0	231.0 198.0	223.0 196.0	215.0	177.0 175.0	139.0	110.0	84.0					
35.0	169.0	169.0	168.0	190.0 167.0	1/5.0	139.0	110.0 110.0	84.0	64.0				
40.0	169.0	144.0	144.0	143.0	145.0	137.0 128.0	106.0	84.0	64.0	50.0	38.8		
45.0		127.0	125.0	124.0	126.0	118.0	101.0	83.0	64.0	50.0	38.8	31.6	
50.0		113.0	112.0	110.0	110.0	110.0	96.0	77.0	64.0	50.0	38.8	31.6	26.4
55.0		113.0	100.0	99.0	98.0	100.0	91.0	71.0	63.0	50.0	38.8	31.6	26.4
60.0			90.0	89.0	88.0	90.0	85.0	66.0	61.0	50.0	38.8	31.6	26.4
65.0			81.0	79.0	78.0	81.0	80.0	60.0	57.0	50.0	38.8	31.6	26.4
70.0			72.0	72.0	73.0	73.0	74.0	56.0	53.0	48.0	38.8	31.6	26.4
75.0			72.0	66.0	67.0	66.0	68.0	52.0	49.0	46.0	38.8	31.6	26.4
80.0				61.0	62.0	60.0	63.0	49.0	45.0	43.4	38.6	31.6	26.4
85.0				58.0	57.0	55.0	58.0	44.0	42.0	40.4	37.4	31.6	26.4
90.0				47.0	52.0	53.0	53.0	40.6	38.8	37.4	35.6	31.6	26.4
95.0					49.0	50.0	49.0	38.4	36.0	35.0	33.6	31.0	26.4
100.0					45.0	47.0	45.0	37.0	33.6	32.6	31.8	30.0	26.4
105.0						43.8	41.6	35.8	31.2	30.4	30.0	28.6	26.4
110.0						40.6	38.4	34.6	29.4	28.6	28.2	27.4	26.0
115.0						37.8	35.6	33.4	27.4	26.8	26.6	26.0	25.0
120.0						34.0	32.8	32.4	25.6	25.0	24.8	24.8	24.0
125.0							30.4	31.4	24.2	23.4	23.2	23.6	23.0
130.0							28.4	30.0	22.6	22.0	21.8	22.2	21.4
135.0							27.6	28.0	20.8	20.2	20.2	20.6	19.8
140.0								26.2	19.0	18.6	18.8	18.8	18.6
145.0								24.4	17.2	17.4	17.8	17.0	17.8
150.0								22.8	16.2	16.8	17.0	16.0	17.0
155.0								20.6	15.2	16.2	16.4	15.2	16.0
160.0									14.4 13.8	15.6	15.8	14.4	15.0 14.2
165.0 170.0										15.2 14.6	15.2	13.8	13.4
175.0									13.2 12.8	14.6	14.6 14.2	13.0 12.4	12.4
180.0									12.0	13.6	13.6	11.8	11.8
185.0										13.4	13.0	11.4	11.0
190.0										13.0	12.6	10.8	10.4
195.0										13.0	12.0	10.8	9.8
200.0											11.6	9.8	9.2
205.0											11.2	9.4	8.6
210.0												9.0	8.2
215.0												8.6	7.6
220.0												8.2	7.2
225.0												7.2	6.6
230.0													6.0
235.0													5.2
240.0													4.6

 $^{^{}st}$ Over the rear with special equipment

Loads greater than 394,000 lb can only be lifted with special equipment.

Main boom



						Pounds	x 1000						
Feet	51.1'	68.7'	86.1'	103.4'	120.8'	138.1'	156.3'	173.5'	191.6'	209.5'	227.4'	245.3'	262.5
10.0	416.0	335.0											
15.0	331.0	316.0	294.0										
20.0	271.0	268.0	256.0	229.0	177.0								
25.0	228.0	225.0	223.0	215.0	177.0	139.0							
30.0	187.0	186.0	186.0	184.0	175.0	139.0	110.0	84.0					
35.0	157.0	157.0	156.0	155.0	156.0	137.0	110.0	84.0	64.0				
40.0		135.0	134.0	133.0	133.0	128.0	106.0	84.0	64.0	50.0	38.8		
45.0		117.0	117.0	117.0	114.0	116.0	101.0	83.0	64.0	50.0	38.8	31.6	
50.0		101.0	103.0	101.0	100.0	102.0	96.0	77.0	64.0	50.0	38.8	31.6	26.4
55.0			90.0	90.0	91.0	90.0	90.0	71.0	63.0	50.0	38.8	31.6	26.4
60.0			80.0	80.0	82.0	80.0	82.0	66.0	61.0	50.0	38.8	31.6	26.4
65.0			72.0	75.0	74.0	72.0	74.0	60.0	57.0	50.0	38.8	31.6	26.4
70.0			65.0	67.0	66.0	66.0	67.0	56.0	53.0	48.0	38.8	31.6	26.4
75.0				61.0	60.0	61.0	60.0	52.0	49.0	46.0	38.8	31.6	26.4
80.0				55.0	54.0	56.0	54.0	49.0	45.0	43.4	38.6	31.6	26.4
85.0				49.0	50.0	51.0	49.0	44.0	42.0	40.4	37.4	31.6	26.4
90.0				45.0	47.0	47.0	44.0	41.0	38.8	37.4	35.6	31.6	26.4
95.0					43.8	42.6	40.0	38.6	36.0	35.0	33.6	31.0	26.4
100.0					40.0	38.6	36.2	37.0	33.6	32.6	31.8	30.0	26.4
105.0						35.4	33.0	35.2	30.8	30.4	30.0	28.6	26.4
110.0						32.6	32.0	32.4	28.0	28.0	28.2	27.4	26.0
115.0						30.0	31.0	30.0	25.4	25.6	26.4	26.0	25.0
120.0						28.0	29.6	27.6	23.0	23.4	24.4	24.8	24.0
125.0							27.6	25.4	20.8	21.6	22.6	23.2	23.0
130.0							25.6	23.4	19.0	20.4	21.0	21.4	21.4
135.0							23.8	21.6	17.6	19.0	19.8	19.6	19.8
140.0								20.0	16.6	18.0	18.6	18.0	18.6
145.0								18.4	16.0	17.4	17.8	16.6	17.6
150.0								17.0	15.4	16.8	17.0	15.8	16.2
155.0								15.8	14.8	16.2	16.4	15.2	14.8
160.0									14.2	15.6	15.6	14.4	13.6
165.0									13.8	14.8	14.8	13.8	12.4
170.0									13.2	13.8	13.8	12.8	11.4
175.0									12.8		12.8	12.0	10.4
180.0										12.8 12.2	11.8	10.8	9.4
185.0										11.8	10.8	10.0	8.4
190.0										11.2	10.0	9.0	7.6
195.0											9.2	8.4	6.8
200.0											8.6	7.6	5.8
205.0											8.2	6.8	5.0
210.0											J. L	6.2	4.4
215.0												5.4	3.6
220.0												4.8	2.0
225.0												4.2	

Load charts Main boom

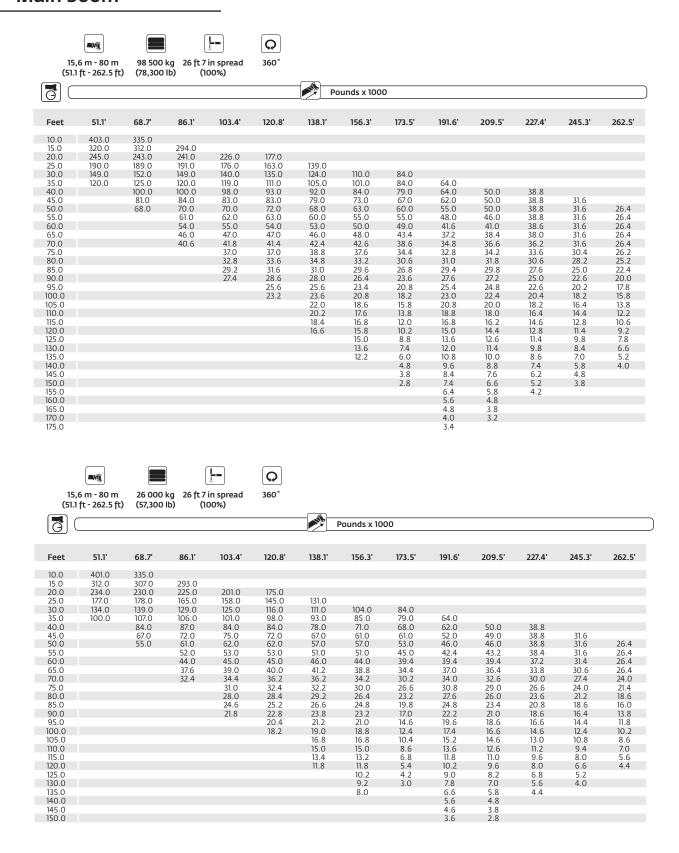
15,6 m - 80 m (51.1 ft - 262.5 ft)	54 500 kg (120,200 lb)	26 ft 7 in spread (100%)	Q 360°

						Po	unds x 1000)					
Feet	51.1'	68.7'	86.1'	103.4'	120.8'	138.1'	156.3'	173.5'	191.6'	209.5'	227.4'	245.3'	262.5
10.0	409.0	335.0											
15.0	325.0	315.0	294.0										
20.0	265.0	263.0	255.0	229.0	177.0								
25.0	210.0	209.0	209.0	208.0	177.0	139.0							
30.0	170.0	172.0	169.0	168.0	167.0	139.0	110.0	84.0					
35.0	139.0	141.0	143.0	141.0	137.0	132.0	110.0	84.0	64.0				
0.0		119.0	120.0	120.0	120.0	113.0	106.0	84.0	64.0	50.0	38.8		
5.0		104.0	103.0	104.0	103.0	97.0	96.0	83.0	64.0	50.0	38.8	31.6	
0.0		89.0	88.0	92.0	90.0	86.0	84.0	77.0	64.0	50.0	38.8	31.6	26.4
5.0			77.0	79.0	78.0	78.0	74.0	70.0	62.0	50.0	38.8	31.6	26.4
0.0			68.0	68.0	67.0	70.0	66.0	62.0	58.0	50.0	38.8	31.6	26.4
5.0			59.0	59.0	62.0	62.0	58.0	55.0	53.0	50.0	38.8	31.6	26.4
70.0			53.0	53.0	56.0	55.0	51.0	50.0	47.0	45.0	38.8	31.6	26.4
75.0				48.0	50.0	48.0	46.0	46.0	41.6	40.8	38.4	31.6	26.4
0.0				45.0	45.0	43.0	41.2	43.0	37.4	36.8	37.0	31.6	26.4
5.0				40.6	40.2	38.8	39.0	38.8	33.8	32.8	33.2	31.6	26.4
0.0				36.8	36.4	35.0	36.8	35.0	30.2	30.2	30.8	30.6	26.4
5.0					33.0	32.8	34.0	31.6	27.2	28.2	29.2	29.4	26.4
0.00					30.0	31.4	30.8	28.4	25.2	27.0	27.8	28.0	25.8
05.0						29.6	28.0	25.8	23.8	25.6	26.6	26.4	23.8
0.0						27.2	25.6	23.4	22.8	24.6	25.0	24.2	21.8
15.0						25.0	23.6	21.4	21.8	23.2	23.0	22.2	19.8
20.0						23.2	21.6	19.4	20.4	21.8	21.2	20.2	19.8 18.2
25.0							19.8	17.6	18.6	20.8	19.4	18.4	16.4
30.0							18.0	15.8	18.0	19.4	18.0	16.8	15.0
5.0							16.6	14.4	17.2	17.8	16.4	15.2	13.4
10.0								13.0	16.4	16.4	15.0	13.8	12.0
15.0								11.6	15.2	15.0	13.8	12.4	10.6
50.0								10.4	14.2	13.8	12.6	11.2	9.2
55.0								9.2	13.2	12.8	11.4	10.0	8.0
50.0									12.4	11.6	10.2	8.8	7.0
55.0									11.4	10.6	9.2	7.8	6.0
70.0									10.4	9.6	8.2	7.8 6.8	5.0
75.0									9.6	8.8	7.2	5.8	4.0
30.0										8.0	6.4	5.0	
35.0										7.0	5.6	4.2	
0.0										6.2	4.8	3.4	
95.0											4.0		
0.00											3.4		

		-	Q
15,6 m - 80 m	45 000 kg	26 ft 7 in spread	360°
(51.1 ft - 262.5 ft)	(99,200 lb)	(100%)	

<u>a</u> [Ро							
						Po	unds x 1000						
Feet	51.1'	68.7'	86.1'	103.4'	120.8'	138.1'	156.3'	173.5'	191.6'	209.5'	227.4'	245.3'	262.5
10.0	407.0	335.0											
15.0	322.0	314.0	294.0										
20.0	256.0	254.0	252.0	228.0	177.0								
25.0	201.0	200.0	200.0	195.0	176.0	139.0							
30.0	160.0	161.0	162.0	159.0	148.0	137.0	110.0	84.0					
35.0	131.0	133.0	134.0	129.0	127.0	118.0	110.0	84.0	64.0				
40.0		112.0	112.0	113.0	106.0	99.0	98.0	84.0	64.0	50.0	38.8		
45.0		94.0	93.0	97.0	91.0	90.0	84.0	78.0	64.0	50.0	38.8	31.6	
50.0		78.0	81.0	81.0	79.0	79.0	73.0	68.0	63.0	50.0	38.8	31.6	26.
55.0			69.0	69.0	71.0	70.0	65.0	60.0	57.0	50.0	38.8	31.6	26.
60.0			60.0	60.0	63.0	61.0	57.0	54.0	50.0	49.0	38.8	31.6	26.
65.0			54.0	55.0	55.0	54.0	50.0	51.0	44.0	43.0	38.8	31.6	26.
70.0			48.0	49.0	49.0	47.0	46.0	46.0	39.4	38.4	37.2	31.6	26.
75.0				43.6	43.4	41.6	42.6	41.6	34.8	35.0	35.2	31.6	26.
80.0				38.8	38.4	37.6	39.6	37.2	31.2	32.6	33.2	31.4	26.
85.0				34.8	34.4	35.8	35.4	33.0	29.4	31.2	31.8	31.4	26.
90.0				31.4	31.4	33.2	31.8	29.6	27.8	29.6	30.2	28.6	25.4
95.0					29.6	30.4	28.8	26.4	26.4	28.0	28.2	26.0	23.4
0.00					28.2	27.6	26.2	23.8	25.2	26.4	26.0	23.8	21.2
05.0						25.2	23.6	21.4	23.8	25.0	23.6	21.6	19.2
110.0						23.0	21.4	19.0	22.6	22.8	21.4	19.6	17.2
115.0						21.0	19.4	17.0	21.0	20.8	19.4	17.8	15.4
20.0						19.2	17.6	15.0	19.2	19.0	17.6	16.0	13.8
25.0							16.0	13.4	17.6	17.4	15.8	14.2	12.2
30.0							14.6	11.6	16.4	15.6	14.2	12.8	10.8
35.0							13.8	10.2	15.0	14.2	12.8	11.2	9.4
40.0								9.0	13.6	12.8	11.4	9.8	8.0
145.0								7.8	12.4	11.6	10.0	8.6	6.6
50.0								6.6	11.2	10.4	8.8	7.4	5.6
155.0								5.6	10.0	9.4	7.8	6.4	4.4
160.0									9.0	8.4	6.8	5.4	3.4
165.0									8.2	7.4	5.8	4.4	
170.0									7.2	6.4	5.0	3.4	
175.0									6.4	5.6	3.8		
0.08										4.8	3.2		
185.0										4.0			
90.0										3.4			

Main boom

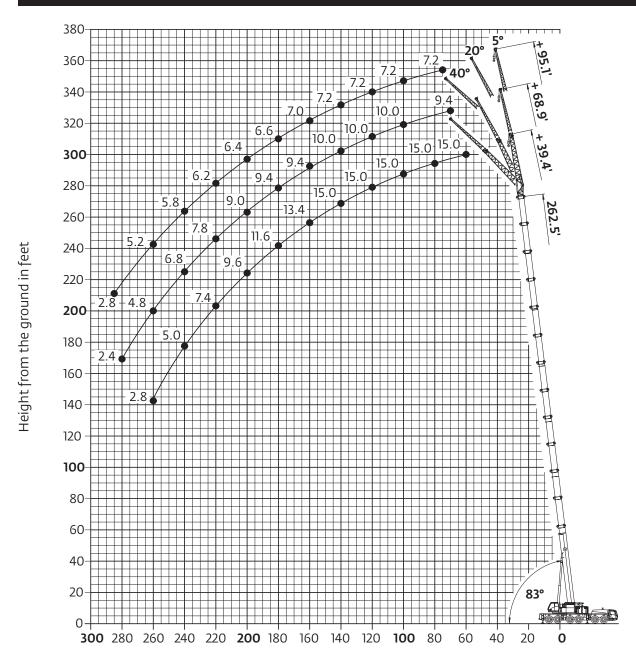


Main boom

15,6 ו	m - 80 m	16 500 kg		Q 360°							
(51.1 ft	- 262.5 ft)	(36,400 lb)	(100%)			Pounds x 100	00				
Feet	51.1'	68.7'	86.1'	103.4'	120.8'	138.1'	156.3'	173.5'	191.6'	209.5'	227.4'
10.0 15.0 20.0 25.0 30.0	396.0 303.0 218.0 153.0 107.0	335.0 287.0 189.0 141.0 108.0	250.0 174.0 133.0 103.0	154.0 121.0 100.0	135.0 114.0 93.0	105.0 84.0	77.0	74.0	13110	203.3	227.7
35.0 40.0 45.0 55.0 66.0 65.0 70.0 75.0 80.0 95.0 100.0 110.0 115.0 125.0 130.0 135.0	78.0	85.0 66.0 54.0 43.8	84.0 71.0 58.0 48.0 40.2 33.4 28.2 24.0	82.0 68.0 57.0 48.0 41.8 37.0 32.0 27.4 23.6 20.4 17.6 15.2	76.0 63.0 49.0 49.0 42.4 28.6 25.0 21.6 18.6 16.4 14.2	69.0 61.0 53.0 45.0 40.8 32.6 22.4 19.6 17.2 15.0 13.0 11.2 9.8 8.4 7.2	68.0 57.0 48.0 41.4 37.2 34.6 30.8 27.4 21.6 19.2 17.0 14.8 13.0 11.2 9.6 8.2 7.0 5.8 4.6 3.8	61.0 51.0 42.6 36.2 31.0 26.4 22.8 19.4 16.4 13.8 11.6 9.6 7.8 6.2 4.6 3.2	54.0 51.0 46.0 40.0 35.0 30.6 27.0 23.6 20.8 18.2 16.0 14.0 12.2 10.6 9.2 8.0 6.6 5.6 4.4 3.4	47.0 42.4 37.4 32.6 28.4 25.0 21.8 19.0 16.6 14.4 12.6 10.8 9.2 8.0 6.6 5.4	38.0 37.6 33.8 29.6 25.6 22.0 19.2 16.6 14.2 12.0 10.4 8.6 7.0 5.8 4.6 3.4
	n - 80 m - 262.5 ft)	7000 kg (15,400 lb)	26 ft 7 in spread (100%)	360°		Pounds x 100	00				
Feet	51	1.1'	68.7'	86.1'		3.4'	120.8'	138.1'	156.	3'	191.6'
10.0 15.0 20.0 25.0 30.0 35.0 40.0 45.0 55.0 60.0 65.0 75.0 80.0 85.0 90.0 95.0 100.0	10.0 394.0 15.0 286.0 20.0 178.0 225.0 119.0 30.0 80.0 35.0 57.0 40.0 45.0 55.0 50.0 55.0 50.0 60.0 655.0 70.0 75.0 80.0 85.0 50.0 60.0 65.0 70.0 75.0 80.0		333.0 244.0 158.0 147.0 115.0 107.0 85.0 64.0 66.0 50.0 54.0 38.6 43.4 30.2 34.8 23.4 18.8 15.4		133.0 104.0 80.0 63.0 52.0 45.0 37.8 32.0 26.8 22.4 18.8 15.6 12.8 10.6 8.6		125.0 94.0 73.0 61.0 52.0 43.6 37.0 31.2 26.6 22.8 19.6 16.8 14.2 11.8 9.8 8.0 6.4	80.0 71.0 58.0 51.0 42.4 35.6 30.4 26.0 22.2 19.2 16.6 14.2 12.2 10.6 8.8 7.2 5.8 4.6 3.4	64. 52. 42. 35. 29. 24. 20. 16. 14. 11. 9.,2,7.	0 0 0 0 0 0 0 2 2 0 0 8 0 0	48. 0 40.4 33.8 28.4 24. 0 20.4 17.2 14.6 12.4 10.4 8.4 7.0 5.6 4.2
	m - 80 m : - 262.5 ft)	0 kg (0 lb)	26 ft 7 in spread (100%)	360°							
3 —					Po	ounds x 1000					
Feet	51	1.1'	68.7'	86.1'	10	3.4'	120.8'	138.1'	156	.3'	191.6'
10.0 15.0 20.0 25.0 30.0 35.0 40.0 45.0 50.0 60.0 65.0 70.0 85.0 80.0 85.0	391.0 259.0 150.0 96.0 62.0 41.6		331.0 211.0 137.0 94.0 70.0 51.0 37.8 28.0 20.8	185.0 126.0 92.0 68.0 52.0 40.4 32.4 25.6 20.6 16.0 12.4 9.2	8 6 5 4 3 2 2 1 1 1 1 1 1 1	8.0 5.0 4.0 3.0 11.6 3.6 7.7 2.2.6 8.4 5.0 2.4 0.0 7.6 6.6	105.0 78.0 63.0 50.0 40.2 32.6 26.8 22.2 18.4 15.2 10.2 8.2 6.4 5.0 3.6	74.0 60.0 48.0 38.4 31.4 26.0 21.6 18.0 15.0 12.4 10.2 8.2 6.4 5.2	51. 39 30 24 19. 15. 12. 9. 7.	0 .6 4 6 6 2 5	36.6 29.4 24.0 19.6 16.0 13.0 10.4 8.2 6.4 4.6 3.2

Working range Hydraulic offsettable swingaway

263 ft main boom with 39 ft - 69 ft swingaway and 26 ft insert



Operating radius in feet from axis of rotation

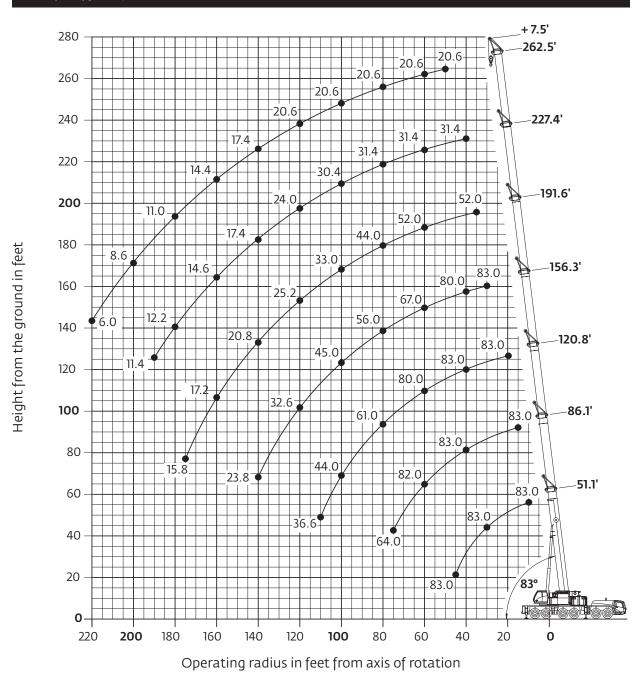
Hook heights shown in the working diagram do not consider loaded boom deflection.

Hydraulic offsettable swingaway

Intermed	liate angle an	d loads for I	uffing						
4 /100	NI FOOD]	 	Q				
80 m	12-21-29 m	92 50)) ka 26 ft	7 in spread	360°				
(262.5 ft)	(39-69-95 lb)	(203,90		(100%)					
3 _				Po	ounds x 1000				
\bigcirc					and x 1000				
Feet	5°	262.5' + 39' 5°- 20°	20°- 40°	5°	262.5' + 69' 5°- 20°	20°- 40°	5°	262.5' + 95' 5°- 20°	20°- 40°
60.0	15.0								
65.0	15.0								
70.0	15.0	14.0	14.0	9.4			7.0		
75.0 80.0	15.0 15.0	14.8 14.8	14.8 14.8	9.4 9.4			7.2 7.2		
80.0 85.0	15.0	14.8	14.8	9.4			7.2		
90.0	15.0	14.8	14.8	9.4	10.0		7.2 7.2		
95.0	15.0	14.8	14.8	9.4	10.0		7.2	7.2	
100.0	15.0	14.8	14.8	9.4	10.0	9.0	7.2 7.2	7.2	
105.0	15.0	14.8	14.8	9.4	10.0	9.0 8.8	7.2	7.2 7.2	
110.0	15.0	14.8	14.8	9.4	10.0	8.8	7.2	7.2	
115.0	15.0	14.8	14.8	9.4	10.0	8.8	7.2	7.2	
115.0 120.0	15.0	14.8 14.8	14.8	9.4	10.0 10.0	8.6	7.2 7.2	7.0	6.0
125.0	15.0	14.8	14.8	9.4	10.0	8.6	7.2	7.0	6.0
130.0	15.0	14.8	14.8	9.4	10.0	8.6	7.2	6.8	6.0
135.0	15.0	14.8	14.6	9.4	10.0	8.4	7.2 7.2	6.8	6.0
140.0	15.0	14.6	14.4	9.4	10.0	8.4	7.2	6.8	6.0
145.0	15.0	14.6	14.0	9.4	9.8	8.4	7.0	6.8	6.0
150.0	14.4	14.2	14.0	9.4	9.4	8.4	7.0	6.6	6.0
155.0	14.0	13.8	13.8	9.4	9.2	8.2	7.0	6.6	6.0
160.0	13.4	13.4	13.4	9.4	9.0	8.2	7.0	6.6	6.0
165.0	13.0	13.0	13.2	9.4	9.0	8.2	6.8	6.6	6.0
170.0	12.4	12.4	12.6	9.4	8.8	8.2	6.8	6.4	6.0
175.0	12.0 11.4	12.0	12.2	9.4 9.4	8.8 8.8	8.2 8.2	6.6 6.6	6.4 6.4	6.0
180.0 185.0		11.4	11.6		8.8	8.2		6.4	6.0
190.0	10.8 10.4	10.8 10.4	11.2 10.6	9.4 9.4	8.6	8.2 8.2	6.6 6.6	6.4 6.2	6.0 6.0
190.0	9.8	9.8	10.6	9.4	8.6 8.6	8.2	6.4	6.2	6.0
200.0	9.2	9.2	9.6	9.0	8.4	8.0	6.4	6.2	6.0
205.0	8.6	8.6	9.0	8.8	8.4	8.0	6.4	6.2	6.0
210.0	8.2	8.2	8.6	8.4	8.4	8.0	6.4	6.2	6.0
215.0	7.6	7.6	8.0	8.2	8.2	8.0	6.2	6.0	6.0
220.0	7.0	7.0	7.4	7.8	7.8	7.8	6.2	6.0	6.0
225.0	6.4	6.4	6.8	7.4	7.4	7.6	6.2	5.8	5.8
230.0	6.0	6.0		7.0	7.0	7.4	6.2	5.8	5.8
235.0	5.4	5.6		6.6	6.6	7.2	6.0	5.8	5.8
240.0	5.0	5.0		6.2	6.2	6.8	5.8	5.8	5.8
245.0	4.4	4.4		5.6	5.8	6.4	5.6	5.6	5.6
250.0	3.6	4.0		5.0	5.2	5.8	5.4	5.4	5.4
255.0	3.2	3.4		4.6	4.8	5.4	5.0	5.2	5.4
260.0	2.6	2.8		4.0	4.2	4.8	4.4	4.6	5.2
265.0 270.0				3.6 3.2	3.8		4.0	4.2	4.8
270.0				3.2	3.4		3.4	3.6	4.4
275.0				2.8	3.0		3.0	3.2	3.8
280.0				2.2	2.4		2.4	2.6	3.4
285.0								2.2	2.8

Working range Integrated heavy duty jib

Heavy duty jib 7.5 ft

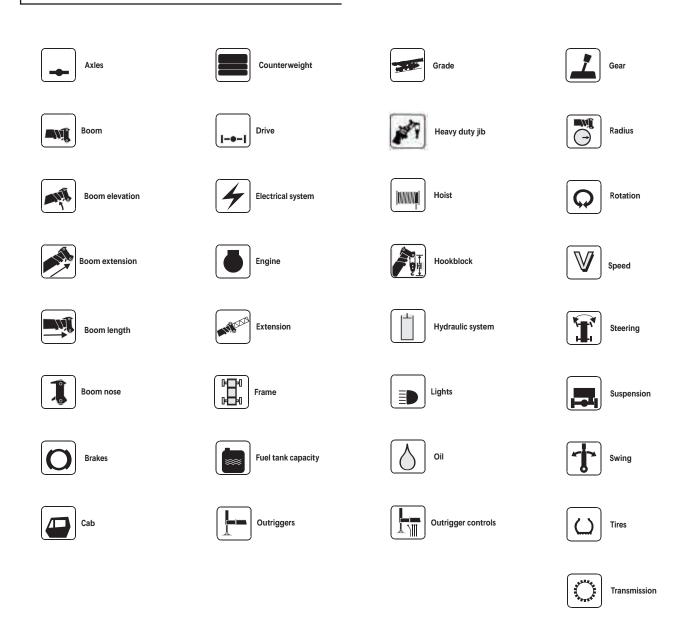


Hook heights shown in the working diagram do not consider loaded boom deflection.

Load charts Integrated heavy duty jib

			27				 		Q					
15,6 m-80 m (51.1 ft-262.5 ft)		2,3 m					7 in spread		360°					
<u></u>							Pou	nds (tho	pusands)					
Feet	51.1' + 7.5'		86.1' + 7.5'		120.8' + 7.5'		156.3' + 7.5'		191.6' + 7.5'		227.4' + 7.5'			5' + 7.5'
	8°	30°	8°	30°	8°	30°	8°	30°	8°	30°	8°	30°	8°	30°
10.0		83.0												
10.0 15.0		83.0		83.0										
20.0		83.0		83.0		83.0								
25.0		83.0		83.0		83.0								
30.0		83.0		83.0		83.0		83.0						
35.0		83.0		83.0		83.0		83.0		52.0				
40.0	83.0	83.0		83.0		83.0		80.0		52.0		31.4		
45.0	83.0	05.0		83.0		83.0		76.0		52.0		31.4		
50.0	05.0			83.0		83.0		72.0		52.0		31.4		20.6
55.0				83.0		82.0		69.0		52.0		31.4		20.6
60.0			82.0	82.0		80.0		67.0		52.0		31.4		20.6
65.0			80.0	81.0		75.0		63.0		52.0		31.4		20.6
70.0			73.0	74.0		69.0		61.0		50.0		31.4		20.6
75.0			64.0			65.0		58.0		48.0		31.4		20.6
80.0						61.0		56.0		44.0		31.4		20.6
85.0						58.0		54.0		41.2		31.4		20.6
90.0					52.0	53.0		52.0		38.0		31.4		20.6
95.0					48.0	49.0		49.0		35.4		31.0		20.6
100.0					44.0			45.0		33.0		30.4		20.6
105.0					41.2			41.6		30.6		28.8		20.6
110.0					36.6			38.2		28.8		27.4		20.6
115.0							34.8	35.2		27.0		25.8		20.6
120.0							32.2	32.6		25.2		24.0		20.6
125.0							29.8	30.0		23.4		22.0		20.4
130.0							27.6	27.8		22.0		19.8		20.0
135.0							25.6		20.0	20.6		18.2		18.8
140.0							23.8		20.8	19.6		17.4		17.4
145.0									19.6	18.8		16.6		16.6
150.0 155.0									18.6 17.8	18.2 17.6		15.8 15.2		15.8 15.2
160.0									17.8	17.6		14.6		14.4
165.0									16.6	17.2		14.6		14.4
170.0									16.4			13.4		12.6
175.0									15.8			12.8		11.8
173.0									15.0			12.2		11.0
185.0												11.8		10.4
190.0												11.4		9.8
195.0												11.7		9.0
200.0														8.6
205.0														8.0
210.0														7.2
215.0														6.6
220.0														6.0

Symbols glossary



Notes

Notes

Notes

Grove GMK6350L 23



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