



Liftcrane Boom

Extended Upper Point Capacities

Boom No. 58 HL with 23.0 ft Extended
Upper Boom Point
224,000 lb Crane Counterweight
0 lb Carbody Counterweight
360 Degree Rating

16000 SERIES 1



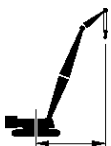
LIFTING CAPACITIES: Lifting capacities for various boom lengths and operating radii are for freely suspended loads and do not exceed 75% of a static tipping load. Capacities based on structural competence are denoted by an asterisk (*).

Upper boom point (upper sheave) capacity for liftcrane service with single part whip line is 30,000 lb. In all cases, upper boom point capacities cannot exceed those listed for extended upper boom point (lower sheave) capacity.

Weight of all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath upper boom point sheaves, is considered part of extended upper boom point load. Boom is not to be lowered beyond radii where combined weights are greater than rated capacity. Where no capacity is shown, operation is not intended or approved.

OPERATING CONDITIONS: Machine to operate in a level position on a firm uniformly supporting surface. Refer to boom rigging **No. A10415**, Wire Rope Specification chart **No. 8674-B**, Counterweight Arrangement chart **No. 8682-A** and Wind Conditions chart **No. 8688-A**. Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, wind conditions, as well as adverse operating conditions and physical machine depreciation. Refer to Operator's Manual for operating guidelines.

MACHINE TRAVEL: Machine to travel on a firm, level and uniformly supporting surface and boom within boom angle range shown in capacity chart. Refer to Maximum Allowable Travel Specification chart **No. 8683-B**.



OPERATING RADIUS: Operating radius is horizontal distance from axis of rotation to center of vertical hoist line or load block.



BOOM ANGLE: Boom angle in degrees ($^{\circ}$) is angle between horizontal and centerline of boom butt and inserts, and is an indication of operating radius. In all cases, operating radius shall govern capacity.



EXTENDED UPPER BOOM POINT

ELEVATION: Extended upper boom point elevation is vertical distance from ground level to centerline of extended upper boom point (lower sheave) shaft.

MACHINE EQUIPMENT: Machine equipped with 34 ft crawlers, 60 in. treads, 32 ft live mast, 26 part boom hoist reeving, boom support straps, 224,000 lb crane counterweight, and 0 lb carbody counterweight.

Maximum Boom Length Lifted Unassisted	
Over End of Blocked Crawlers	Over Side of Crawlers
Boom Length	Boom Length
236.2 ft	216.5 ft
Load block, hook and weight ball on ground at start.	

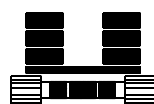
Boom Catwalks Deduct

Deduct 600 lb from capacities when boom catwalks are attached.

Lower boom point must be removed when extended upper boom point is attached.

Explanation of Symbols

58 HL  Boom No. 58 Heavy Lift Top
with 23.0 ft Extended Upper
Boom Point

 Crane Counterweight
+
Carbody Counterweight

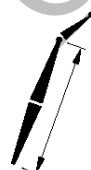
 360° 360 Degree Rating

 Operating Radius
(see page 1)

 Boom Angle
(see page 1)

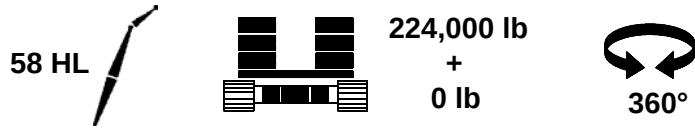
 Extended Upper
Boom Point Elevation
(see page 1)

 Lifting Capacities
(see page 1)

 Boom Length

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ANSI B30.5



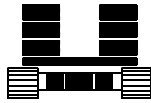
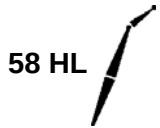
ft	°	ft	lb
137.8 ft			
45	80.5	164.0	215,200 *
50	78.7	162.6	213,900
55	76.8	161.1	185,200
60	74.9	159.4	162,600
65	73.0	157.4	144,200
70	71.0	155.3	129,000
75	69.1	153.0	116,200
80	67.1	150.5	105,300
85	65.0	147.7	95,900
90	62.9	144.7	87,700
95	60.8	141.4	80,500
100	58.6	137.9	74,100
105	56.4	134.1	68,300
110	54.0	129.9	63,100
115	51.6	125.4	58,500
120	49.1	120.5	54,200
125	46.5	115.1	50,300
130	43.7	109.2	46,700
135	40.8	102.6	43,400
140	37.6	95.2	40,300

ft	°	ft	lb
157.5 ft			
45	81.6	184.2	215,200 *
50	79.9	183.0	213,600
55	78.3	181.6	184,800
60	76.6	180.1	162,100
65	74.9	178.4	143,600
70	73.2	176.6	128,300
75	71.5	174.5	115,500
80	69.8	172.3	104,500
85	68.0	169.9	95,100
90	66.2	167.4	86,800
95	64.4	164.6	79,600
100	62.6	161.6	73,100
105	60.7	158.4	67,400
110	58.7	154.9	62,200
115	56.7	151.2	57,500
120	54.7	147.2	53,300
125	52.6	142.9	49,400
130	50.4	138.2	45,800
135	48.2	133.2	42,500
140	45.8	127.7	39,500
145	43.3	121.8	36,600
150	40.7	115.3	34,000
155	37.9	108.2	31,500

ft	°	ft	lb
177.2 ft			
45	82.4	204.3	215,200 *
50	81.0	203.2	213,500
55	79.5	202.0	184,600
60	78.0	200.6	161,700
65	76.5	199.1	143,200
70	75.0	197.5	127,900
75	73.5	195.7	115,000
80	71.9	193.7	104,000
85	70.4	191.6	94,500
90	68.8	189.3	86,300
95	67.2	186.9	79,000
100	65.6	184.3	72,500
105	63.9	181.5	66,800
110	62.2	178.5	61,600
115	60.5	175.3	56,900
120	58.8	171.9	52,600
125	57.0	168.2	48,800
130	55.2	164.4	45,200
135	53.3	160.2	41,900
140	51.4	155.8	38,900
145	49.4	151.0	36,100
150	47.4	145.9	33,500
155	45.3	140.4	31,000
160	43.0	134.5	28,700
165	40.7	128.1	26,600
170	38.2	121.0	24,500
175	35.6	113.3	22,600

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224,000 lb
+
0 lb



ft	°	ft	lb
196.9 ft			
50	81.8	223.3	213,100
55	80.4	222.2	184,100
60	79.1	221.0	161,100
65	77.7	219.6	142,400
70	76.4	218.1	127,000
75	75.0	216.5	114,100
80	73.6	214.8	103,000
85	72.2	212.9	93,500
90	70.8	210.8	85,200
95	69.4	208.7	77,900
100	67.9	206.3	71,400
105	66.5	203.9	65,600
110	65.0	201.2	60,400
115	63.5	198.4	55,700
120	62.0	195.4	51,500
125	60.4	192.2	47,600
130	58.9	188.9	44,000
135	57.3	185.3	40,700
140	55.6	181.5	37,700
145	53.9	177.5	34,800
150	52.2	173.2	32,200
155	50.4	168.6	29,800
160	48.6	163.8	27,500
165	46.8	158.6	25,400
170	44.8	153.1	23,400
175	42.8	147.2	21,500
180	40.7	140.8	19,700
185	38.4	133.9	18,000
190	36.1	126.4	16,400

ft	°	ft	lb
216.5 ft			
50	82.5	243.4	212,800
55	81.2	242.3	183,600
60	80.0	241.2	160,500
65	78.8	240.0	141,800
70	77.5	238.6	126,400
75	76.3	237.1	113,400
80	75.0	235.6	102,300
85	73.8	233.8	92,700
90	72.5	232.0	84,400
95	71.2	230.0	77,100
100	69.9	227.9	70,600
105	68.6	225.7	64,800
110	67.3	223.3	59,600
115	65.9	220.8	54,800
120	64.5	218.1	50,600
125	63.2	215.3	46,700
130	61.8	212.3	43,100
135	60.4	209.2	39,800
140	58.9	205.8	36,800
145	57.4	202.3	33,900
150	56.0	198.6	31,300
155	54.4	194.7	28,900
160	52.9	190.5	26,600
165	51.3	186.1	24,500
170	49.6	181.5	22,500
175	48.0	176.6	20,600
180	46.2	171.4	18,800
185	44.4	165.8	17,100
190	42.6	159.9	15,500
195	40.6	153.5	14,000
200	38.6	146.7	12,600
205	36.5	139.4	11,200

ft	°	ft	lb
236.2 ft			
55	81.9	262.4	183,000
60	80.8	261.4	159,800
65	79.7	260.2	141,000
70	78.5	259.0	125,500
75	77.4	257.6	112,400
80	76.2	256.2	101,300
85	75.0	254.6	91,700
90	73.9	252.9	83,300
95	72.7	251.1	75,900
100	71.5	249.2	69,400
105	70.3	247.2	63,500
110	69.1	245.0	58,300
115	67.9	242.7	53,600
120	66.7	240.3	49,300
125	65.4	237.8	45,300
130	64.2	235.1	41,700
135	62.9	232.2	38,400
140	61.6	229.2	35,400
145	60.3	226.1	32,600
150	59.0	222.8	30,000
155	57.6	219.3	27,500
160	56.2	215.7	25,200
165	54.8	211.8	23,100
170	53.4	207.8	21,100
175	52.0	203.5	19,200
180	50.5	199.1	17,400
185	48.9	194.3	15,800
190	47.4	189.3	14,200
195	45.8	184.1	12,700
200	44.1	178.5	11,200
205	42.4	172.6	9,900
210	40.6	166.3	8,600
215	38.8	159.5	7,300