



Liftcrane Boom

Extended Upper Point Capacities

Boom No. 58 HL with 23.0 ft Extended
Upper Boom Point
296,000 lb Crane Counterweight
60,000 lb Carbody Counterweight
360 Degree Rating

16000 SERIES 2



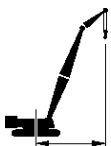
LIFTING CAPACITIES: Lifting capacities for various boom lengths and operating radii are for freely suspended loads and do not exceed 75% of a static tipping load. Capacities based on structural competence are denoted by an asterisk (*).

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, 296,000 lb crane counterweight, and two 30,000 lb carbody counterweights.

Maximum Boom Length Lifted Unassisted

Over End of Blocked Crawlers	Over Side of Crawlers
Boom Length	Boom Length
275.6 ft	255.9 ft
Load block, hook and weight ball on ground at start.	

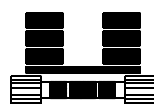
Boom Catwalks Deduct

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

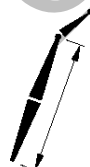
 360° 360 Degree Rating

 Operating Radius
(see page 1)

 Boom Angle
(see page 1)

 Extended Upper
Boom Point Elevation
(see page 1)

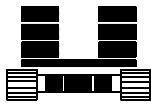
 Lifting Capacities
(see page 1)

 Boom Length

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58 HL   296,000 lb
+
60,000 lb  360°

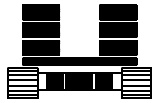
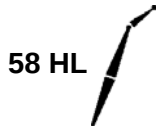
ft	°	ft	lb
137.8 ft			
45	80.5	164.0	215,200 *
50	78.7	162.6	215,200 *
55	76.8	161.1	215,200 *
60	74.9	159.4	211,100
65	73.0	157.4	188,100
70	71.0	155.3	169,100
75	69.1	153.0	153,100
80	67.1	150.5	139,500
85	65.0	147.7	127,700
90	62.9	144.7	117,500
95	60.8	141.4	108,400
100	58.6	137.9	100,400
105	56.4	134.1	93,200
110	54.0	129.9	86,800
115	51.6	125.4	81,000
120	49.1	120.5	75,600
125	46.5	115.1	70,800
130	43.7	109.2	66,300
135	40.8	102.6	62,200
140	37.6	95.2	58,400

ft	°	ft	lb
157.5 ft			
45	81.6	184.2	215,200 *
50	79.9	183.0	215,200 *
55	78.3	181.6	215,200 *
60	76.6	180.1	210,500
65	74.9	178.4	187,500
70	73.2	176.6	168,400
75	71.5	174.5	152,400
80	69.8	172.3	138,700
85	68.0	169.9	126,900
90	66.2	167.4	116,600
95	64.4	164.6	107,500
100	62.6	161.6	99,500
105	60.7	158.4	92,300
110	58.7	154.9	85,900
115	56.7	151.2	80,000
120	54.7	147.2	74,700
125	52.6	142.9	69,900
130	50.4	138.2	65,400
135	48.2	133.2	61,300
140	45.8	127.7	57,600
145	43.3	121.8	54,000
150	40.7	115.3	50,800
155	37.9	108.2	47,700

ft	°	ft	lb
177.2 ft			
45	82.4	204.3	215,200 *
50	81.0	203.2	215,200 *
55	79.5	202.0	215,200 *
60	78.0	200.6	210,200
65	76.5	199.1	187,100
70	75.0	197.5	167,900
75	73.5	195.7	151,900
80	71.9	193.7	138,200
85	70.4	191.6	126,300
90	68.8	189.3	116,000
95	67.2	186.9	106,900
100	65.6	184.3	98,900
105	63.9	181.5	91,700
110	62.2	178.5	85,200
115	60.5	175.3	79,400
120	58.8	171.9	74,100
125	57.0	168.2	69,300
130	55.2	164.4	64,800
135	53.3	160.2	60,700
140	51.4	155.8	57,000
145	49.4	151.0	53,500
150	47.4	145.9	50,200
155	45.3	140.4	47,200
160	43.0	134.5	44,400
165	40.7	128.1	41,700
170	38.2	121.0	39,200
175	35.6	113.3	36,800

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296,000 lb
+
60,000 lb



360°

ft	°	ft	lb
196.9 ft			
50	81.8	223.3	215,200 *
55	80.4	222.2	215,200 *
60	79.1	221.0	209,500
65	77.7	219.6	186,300
70	76.4	218.1	167,100
75	75.0	216.5	151,000
80	73.6	214.8	137,200
85	72.2	212.9	125,300
90	70.8	210.8	115,000
95	69.4	208.7	105,800
100	67.9	206.3	97,800
105	66.5	203.9	90,600
110	65.0	201.2	84,100
115	63.5	198.4	78,200
120	62.0	195.4	72,900
125	60.4	192.2	68,100
130	58.9	188.9	63,600
135	57.3	185.3	59,500
140	55.6	181.5	55,800
145	53.9	177.5	52,300
150	52.2	173.2	49,000
155	50.4	168.6	46,000
160	48.6	163.8	43,200
165	46.8	158.6	40,500
170	44.8	153.1	38,000
175	42.8	147.2	35,700
180	40.7	140.8	33,500
185	38.4	133.9	31,400
190	36.1	126.4	29,400

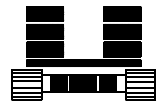
ft	°	ft	lb
216.5 ft			
50	82.5	243.4	215,200 *
55	81.2	242.3	215,200 *
60	80.0	241.2	209,000
65	78.8	240.0	185,700
70	77.5	238.6	166,500
75	76.3	237.1	150,300
80	75.0	235.6	136,500
85	73.8	233.8	124,500
90	72.5	232.0	114,200
95	71.2	230.0	105,000
100	69.9	227.9	96,900
105	68.6	225.7	89,700
110	67.3	223.3	83,200
115	65.9	220.8	77,300
120	64.5	218.1	72,000
125	63.2	215.3	67,200
130	61.8	212.3	62,700
135	60.4	209.2	58,600
140	58.9	205.8	54,800
145	57.4	202.3	51,400
150	56.0	198.6	48,100
155	54.4	194.7	45,100
160	52.9	190.5	42,300
165	51.3	186.1	39,600
170	49.6	181.5	37,100
175	48.0	176.6	34,800
180	46.2	171.4	32,600
185	44.4	165.8	30,500
190	42.6	159.9	28,500
195	40.6	153.5	26,700
200	38.6	146.7	24,900
205	36.5	139.4	23,200

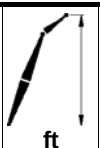
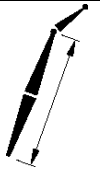
ft	°	ft	lb
236.2 ft			
55	81.9	262.4	215,200 *
60	80.8	261.4	208,300
65	79.7	260.2	184,900
70	78.5	259.0	165,500
75	77.4	257.6	149,300
80	76.2	256.2	135,400
85	75.0	254.6	123,400
90	73.9	252.9	113,000
95	72.7	251.1	103,800
100	71.5	249.2	95,700
105	70.3	247.2	88,500
110	69.1	245.0	81,900
115	67.9	242.7	76,100
120	66.7	240.3	70,700
125	65.4	237.8	65,800
130	64.2	235.1	61,400
135	62.9	232.2	57,300
140	61.6	229.2	53,500
145	60.3	226.1	50,000
150	59.0	222.8	46,700
155	57.6	219.3	43,700
160	56.2	215.7	40,900
165	54.8	211.8	38,200
170	53.4	207.8	35,700
175	52.0	203.5	33,400
180	50.5	199.1	31,200
185	48.9	194.3	29,100
190	47.4	189.3	27,200
195	45.8	184.1	25,300
200	44.1	178.5	23,500
205	42.4	172.6	21,900
210	40.6	166.3	20,300
215	38.8	159.5	18,700
220	36.8	152.3	17,300

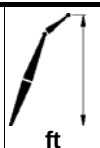
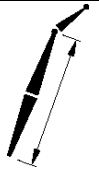
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ANSI B30.5



58 HL   296,000 lb
+
60,000 lb  360°

			
ft	°	ft	lb
 255.9 ft			
55	82.5	282.4	201,500 *
60	81.5	281.5	196,800 *
65	80.4	280.4	184,200
70	79.3	279.2	164,800
75	78.3	278.0	148,400
80	77.2	276.6	134,500
85	76.1	275.2	122,500
90	75.1	273.6	112,000
95	74.0	272.0	102,800
100	72.9	270.2	94,700
105	71.8	268.4	87,400
110	70.7	266.4	80,800
115	69.6	264.3	74,900
120	68.4	262.1	69,600
125	67.3	259.7	64,700
130	66.2	257.3	60,200
135	65.0	254.7	56,100
140	63.8	252.0	52,300
145	62.6	249.1	48,800
150	61.4	246.2	45,500
155	60.2	243.0	42,500
160	59.0	239.8	39,700
165	57.7	236.3	37,000
170	56.5	232.7	34,500
175	55.2	229.0	32,200
180	53.9	225.0	30,000
185	52.5	220.9	27,900
190	51.2	216.5	25,900
195	49.8	211.9	24,100
200	48.4	207.2	22,300
205	46.9	202.1	20,600
210	45.4	196.8	19,000
215	43.8	191.2	17,500
220	42.2	185.3	16,100
225	40.6	179.0	14,700
230	38.9	172.4	13,300
235	37.1	165.2	12,100
240	35.2	157.6	10,800

			
ft	°	ft	lb
 275.6 ft			
55	83.0	302.4	193,700 *
60	82.0	301.5	190,100 *
65	81.0	300.5	183,400
70	80.1	299.4	163,900
75	79.1	298.3	147,500
80	78.1	297.0	133,500
85	77.1	295.7	121,400
90	76.1	294.2	110,900
95	75.1	292.7	101,600
100	74.1	291.0	93,400
105	73.1	289.3	86,100
110	72.0	287.5	79,600
115	71.0	285.5	73,600
120	70.0	283.5	68,200
125	68.9	281.4	63,300
130	67.9	279.1	58,800
135	66.8	276.7	54,700
140	65.7	274.3	50,900
145	64.6	271.7	47,400
150	63.5	268.9	44,100
155	62.4	266.1	41,100
160	61.3	263.1	38,200
165	60.2	260.0	35,500
170	59.0	256.7	33,100
175	57.9	253.3	30,700
180	56.7	249.8	28,500
185	55.5	246.1	26,400
190	54.3	242.2	24,500
195	53.0	238.1	22,600
200	51.8	233.9	20,800
205	50.5	229.5	19,200
210	49.2	224.8	17,600
215	47.8	220.0	16,000
220	46.5	214.9	14,600
225	45.1	209.5	13,200
230	43.6	203.9	11,900
235	42.1	198.0	10,600
240	40.6	191.8	9,400
245	39.0	185.1	8,200
250	37.3	178.1	7,100