



Liftcrane Boom

Extended Upper Point Capacities

Boom No. 58 HL with 23.0 ft Extended
Upper Boom Point
332,000 lb Crane Counterweight
120,000 lb Carbody Counterweight
360 Degree Rating

16000 SERIES 3



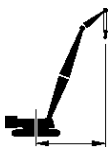
LIFTING CAPACITIES: Lifting capacities for various boom lengths and operating radii are for freely suspended loads and do not exceed 75% of a static tipping load. Capacities based on structural competence are denoted by an asterisk (*).

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, 332,000 lb crane counterweight, two 30,000 lb and four 15,000 lb carbody counterweights.

Maximum Boom Length Lifted Unassisted

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

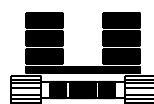
Boom Catwalks Deduct

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

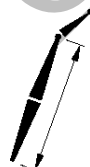
 360° 360 Degree Rating

 Operating Radius
(see page 1)

 Boom Angle
(see page 1)

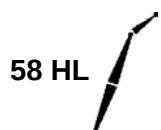
 Extended Upper
Boom Point Elevation
(see page 1)

 Lifting Capacities
(see page 1)

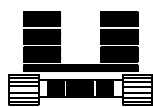
 Boom Length

16000 S-3

ANSI B30.5



58 HL



332,000 lb
+
120,000 lb



360°

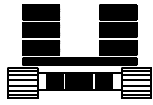
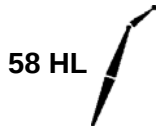
ft	°	ft	lb
137.8 ft			
45	80.5	164.0	215,200 *
50	78.7	162.6	215,200 *
55	76.8	161.1	215,200 *
60	74.9	159.4	215,200 *
65	73.0	157.4	214,800
70	71.0	155.3	193,500
75	69.1	153.0	175,500
80	67.1	150.5	160,300
85	65.0	147.7	147,100
90	62.9	144.7	135,600
95	60.8	141.4	125,500
100	58.6	137.9	116,500
105	56.4	134.1	108,500
110	54.0	129.9	101,200
115	51.6	125.4	94,700
120	49.1	120.5	88,800
125	46.5	115.1	83,300
130	43.7	109.2	78,400
135	40.8	102.6	73,800
140	37.6	95.2	69,500

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	215,200 *
65	74.9	178.4	214,100
70	73.2	176.6	192,700
75	71.5	174.5	174,800
80	69.8	172.3	159,500
85	68.0	169.9	146,200
90	66.2	167.4	134,700
95	64.4	164.6	124,500
100	62.6	161.6	115,500
105	60.7	158.4	107,500
110	58.7	154.9	100,300
115	56.7	151.2	93,800
120	54.7	147.2	87,800
125	52.6	142.9	82,400
130	50.4	138.2	77,400
135	48.2	133.2	72,900
140	45.8	127.7	68,600
145	43.3	121.8	64,700
150	40.7	115.3	61,000
155	37.9	108.2	57,600

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	215,200 *
65	76.5	199.1	213,700
70	75.0	197.5	192,300
75	73.5	195.7	174,300
80	71.9	193.7	158,900
85	70.4	191.6	145,700
90	68.8	189.3	134,100
95	67.2	186.9	123,900
100	65.6	184.3	114,900
105	63.9	181.5	106,900
110	62.2	178.5	99,700
115	60.5	175.3	93,100
120	58.8	171.9	87,200
125	57.0	168.2	81,800
130	55.2	164.4	76,800
135	53.3	160.2	72,200
140	51.4	155.8	68,000
145	49.4	151.0	64,100
150	47.4	145.9	60,500
155	45.3	140.4	57,100
160	43.0	134.5	53,900
165	40.7	128.1	51,000
170	38.2	121.0	48,200
175	35.6	113.3	45,500

16000 S-3

ANSI B30.5



332,000 lb
+
120,000 lb



360°

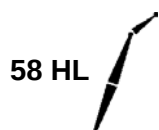
ft	°	ft	lb
196.9 ft			
50	81.8	223.3	215,200 *
55	80.4	222.2	215,200 *
60	79.1	221.0	215,200 *
65	77.7	219.6	212,900
70	76.4	218.1	191,400
75	75.0	216.5	173,300
80	73.6	214.8	157,900
85	72.2	212.9	144,600
90	70.8	210.8	133,000
95	69.4	208.7	122,800
100	67.9	206.3	113,800
105	66.5	203.9	105,700
110	65.0	201.2	98,500
115	63.5	198.4	91,900
120	62.0	195.4	86,000
125	60.4	192.2	80,600
130	58.9	188.9	75,600
135	57.3	185.3	71,000
140	55.6	181.5	66,800
145	53.9	177.5	62,900
150	52.2	173.2	59,300
155	50.4	168.6	55,900
160	48.6	163.8	52,700
165	46.8	158.6	49,800
170	44.8	153.1	47,000
175	42.8	147.2	44,400
180	40.7	140.8	41,900
185	38.4	133.9	39,600
190	36.1	126.4	37,300

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	215,200 *
65	78.8	240.0	212,300
70	77.5	238.6	190,800
75	76.3	237.1	172,600
80	75.0	235.6	157,200
85	73.8	233.8	143,800
90	72.5	232.0	132,200
95	71.2	230.0	122,000
100	69.9	227.9	112,900
105	68.6	225.7	104,900
110	67.3	223.3	97,600
115	65.9	220.8	91,000
120	64.5	218.1	85,100
125	63.2	215.3	79,600
130	61.8	212.3	74,700
135	60.4	209.2	70,100
140	58.9	205.8	65,900
145	57.4	202.3	62,000
150	56.0	198.6	58,300
155	54.4	194.7	55,000
160	52.9	190.5	51,800
165	51.3	186.1	48,900
170	49.6	181.5	46,100
175	48.0	176.6	43,500
180	46.2	171.4	41,000
185	44.4	165.8	38,700
190	42.6	159.9	36,500
195	40.6	153.5	34,400
200	38.6	146.7	32,400
205	36.5	139.4	30,500

ft	°	ft	lb
236.2 ft			
55	81.9	262.4	215,200 *
60	80.8	261.4	215,200 *
65	79.7	260.2	211,500
70	78.5	259.0	189,900
75	77.4	257.6	171,700
80	76.2	256.2	156,100
85	75.0	254.6	142,800
90	73.9	252.9	131,100
95	72.7	251.1	120,800
100	71.5	249.2	111,700
105	70.3	247.2	103,600
110	69.1	245.0	96,300
115	67.9	242.7	89,700
120	66.7	240.3	83,800
125	65.4	237.8	78,300
130	64.2	235.1	73,300
135	62.9	232.2	68,700
140	61.6	229.2	64,500
145	60.3	226.1	60,600
150	59.0	222.8	57,000
155	57.6	219.3	53,600
160	56.2	215.7	50,400
165	54.8	211.8	47,500
170	53.4	207.8	44,700
175	52.0	203.5	42,100
180	50.5	199.1	39,600
185	48.9	194.3	37,300
190	47.4	189.3	35,100
195	45.8	184.1	33,000
200	44.1	178.5	31,100
205	42.4	172.6	29,200
210	40.6	166.3	27,400
215	38.8	159.5	25,700
220	36.8	152.3	24,100

16000 S-3

ANSI B30.5



58 HL



332,000 lb
+
120,000 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	192,600 *
70	79.3	279.2	188,500 *
75	78.3	278.0	170,800
80	77.2	276.6	155,200
85	76.1	275.2	141,800
90	75.1	273.6	130,100
95	74.0	272.0	119,800
100	72.9	270.2	110,700
105	71.8	268.4	102,500
110	70.7	266.4	95,200
115	69.6	264.3	88,600
120	68.4	262.1	82,600
125	67.3	259.7	77,200
130	66.2	257.3	72,200
135	65.0	254.7	67,600
140	63.8	252.0	63,300
145	62.6	249.1	59,400
150	61.4	246.2	55,700
155	60.2	243.0	52,400
160	59.0	239.8	49,200
165	57.7	236.3	46,200
170	56.5	232.7	43,500
175	55.2	229.0	40,800
180	53.9	225.0	38,400
185	52.5	220.9	36,100
190	51.2	216.5	33,900
195	49.8	211.9	31,800
200	48.4	207.2	29,800
205	46.9	202.1	28,000
210	45.4	196.8	26,200
215	43.8	191.2	24,500
220	42.2	185.3	22,900
225	40.6	179.0	21,300
230	38.9	172.4	19,800
235	37.1	165.2	18,400
240	35.2	157.6	17,100

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	186,600 *
70	80.1	299.4	183,500 *
75	79.1	298.3	169,800
80	78.1	297.0	154,200
85	77.1	295.7	140,700
90	76.1	294.2	128,900
95	75.1	292.7	118,600
100	74.1	291.0	109,400
105	73.1	289.3	101,300
110	72.0	287.5	93,900
115	71.0	285.5	87,300
120	70.0	283.5	81,300
125	68.9	281.4	75,800
130	67.9	279.1	70,800
135	66.8	276.7	66,200
140	65.7	274.3	61,900
145	64.6	271.7	58,000
150	63.5	268.9	54,300
155	62.4	266.1	50,900
160	61.3	263.1	47,700
165	60.2	260.0	44,800
170	59.0	256.7	42,000
175	57.9	253.3	39,400
180	56.7	249.8	36,900
185	55.5	246.1	34,600
190	54.3	242.2	32,400
195	53.0	238.1	30,300
200	51.8	233.9	28,400
205	50.5	229.5	26,500
210	49.2	224.8	24,700
215	47.8	220.0	23,000
220	46.5	214.9	21,400
225	45.1	209.5	19,800
230	43.6	203.9	18,400
235	42.1	198.0	17,000
240	40.6	191.8	15,600
245	39.0	185.1	14,300
250	37.3	178.1	13,000
255	35.6	170.7	11,800

ft	°	ft	lb
295.3 ft			
60	82.5	321.5	168,600 *
65	81.6	320.5	165,000 *
70	80.7	319.5	161,500 *
75	79.8	318.5	158,200 *
80	78.8	317.3	153,200
85	77.9	316.0	139,700
90	77.0	314.7	127,900
95	76.0	313.2	117,500
100	75.1	311.7	108,300
105	74.1	310.1	100,200
110	73.2	308.4	92,800
115	72.2	306.6	86,200
120	71.3	304.7	80,100
125	70.3	302.7	74,600
130	69.3	300.6	69,600
135	68.3	298.4	65,000
140	67.3	296.1	60,700
145	66.3	293.7	56,800
150	65.3	291.2	53,100
155	64.3	288.6	49,700
160	63.3	285.9	46,500
165	62.2	283.0	43,600
170	61.2	280.0	40,800
175	60.1	276.9	38,200
180	59.1	273.7	35,700
185	58.0	270.3	33,400
190	56.9	266.8	31,200
195	55.7	263.1	29,100
200	54.6	259.3	27,100
205	53.5	255.4	25,300
210	52.3	251.2	23,500
215	51.1	246.9	21,800
220	49.9	242.4	20,200
225	48.6	237.7	18,700
230	47.4	232.8	17,200
235	46.1	227.6	15,800
240	44.8	222.3	14,400
245	43.4	216.6	13,100
250	42.0	210.7	11,900
255	40.6	204.5	10,700
260	39.1	197.9	9,500
265	37.5	191.0	8,400
270	35.9	183.6	7,400