

Link-Belt® ABS-238A lifting crane capacities

Refer to Notes page 4.

Boom — angle: 48" x 48" (1.22 m x 1.22 m) with boom live mast and 1 3/4" (44 mm) diameter boom pendants.

Boom tip extension — angle: 10' (3.05 m) long.

Counterweight — 47,000 lbs. (21 319 kg) "AB" only.

Main boom length	Load radius		Main boom angle	Main boom point height [ⓐ]		Main boom pendant lengths [ⓑ]	Permissible working loads [ⓐ]					
							Counterweight "AB"			Counterweight "AB"		
							Off main boom without tip extension mounted on boom		Parts of load hoist wire rope	Off main boom with tip extension mounted on boom		Parts of load hoist wire rope
							Lbs.	kg	Required	Lbs.	kg	Required
50' (15.24 m)	13	3.96	79.0	49' 1"	14.97	30' (9.14 m)	228.6	103 6	10	226.9	102 9	10
	14	4.27	77.9	48' 11"	14.90		228.6	103 6	10	226.9	102 9	10
	15	4.57	76.7	48' 8"	14.83		228.6	103 6	10	226.9	102 9	10
	20	6.10	70.7	47' 3"	14.39		169.7	76 9	8	168.0	76 2	8
	25	7.62	64.5	45' 2"	13.76		130.5	59 1	6	128.8	58 4	6
	30	9.14	58.0	42' 5"	12.93		105.3	47 7	5	103.6	46 9	5
	35	10.67	50.9	38' 10"	11.84		87.6	39 7	4	85.9	38 9	4
	40	12.19	43.1	34' 2"	10.42		74.6	33 8	4	72.9	33 0	4
50	15.24	21.6	18' 5"	5.60	56.5	25 6	3	54.8	24 8	3		
60' (18.29 m)	15	4.57	78.9	58' 11"	17.95	40' (12.19 m)	228.4	103 6	10	226.7	102 8	10
	20	6.10	74.0	57' 8"	17.59		170.1	77 1	8	168.4	76 3	8
	25	7.62	69.0	56' 0"	17.08		130.9	59 3	6	129.2	58 6	6
	30	9.14	63.8	53' 10"	16.41		105.7	47 9	5	104.0	47 1	5
	35	10.67	58.3	51' 1"	15.57		88.1	39 9	4	86.4	39 1	4
	40	12.19	52.5	47' 8"	14.52		75.0	34 0	4	73.3	33 2	4
	50	15.24	39.2	37' 11"	11.56		57.0	25 8	3	55.3	25 0	3
	60	18.29	19.7	20' 2"	6.16		45.1	20 4	3	43.4	19 6	2
70' (21.34 m)	20	6.10	76.4	68' 0"	20.74	50' (15.24 m)	171.4	77 7	8	169.7	76 9	8
	25	7.62	72.1	66' 8"	20.31		132.0	59 8	6	130.4	59 1	6
	30	9.14	67.8	64' 10"	19.75		106.5	48 3	5	104.8	47 5	5
	35	10.67	63.3	62' 6"	19.06		88.8	40 2	4	87.1	39 5	4
	40	12.19	58.6	59' 9"	18.21		75.7	34 3	4	74.0	33 5	4
	50	15.24	48.4	52' 4"	15.95		57.7	26 1	3	56.0	25 4	3
	60	18.29	36.2	41' 4"	12.60		45.7	20 7	3	44.0	19 9	2
	70	21.34	18.2	21' 10"	6.67		37.2	16 8	2	35.5	16 1	2
80' (24.38 m)	20	6.10	78.1	78' 3"	23.86	60' (18.29 m)	171.4	77 7	8	169.7	76 9	8
	25	7.62	74.4	77' 1"	23.49		131.9	59 8	6	130.2	59 0	6
	30	9.14	70.7	75' 6"	23.01		106.5	48 3	5	104.8	47 5	5
	35	10.67	66.8	73' 7"	22.42		88.8	40 2	4	87.1	39 5	4
	40	12.19	62.9	71' 2"	21.70		75.6	34 2	4	73.9	33 5	4
	50	15.24	54.5	65' 1"	19.84		57.6	26 1	3	55.9	25 3	3
	60	18.29	45.1	56' 8"	17.27		45.7	20 7	3	44.0	19 9	2
	70	21.34	33.8	44' 6"	13.56		37.4	16 9	2	35.7	16 1	2
80	24.38	17.0	23' 5"	7.14	30.9	14 0	2	29.2	13 2	2		
90' (27.43 m)	20	6.10	79.4	88' 6"	26.97	70' (21.34 m)	171.2	77 6	8	169.5	76 8	8
	25	7.62	76.2	87' 5"	26.64		131.7	59 7	6	130.0	58 9	6
	30	9.14	72.9	86' 0"	26.22		106.3	48 2	5	104.6	47 4	5
	35	10.67	69.5	84' 4"	25.70		88.6	40 1	4	86.9	39 4	4
	40	12.19	66.1	82' 3"	25.08		75.5	34 2	4	73.8	33 4	4
	50	15.24	58.9	77' 1"	23.49		57.5	26 0	3	55.8	25 3	3
	60	18.29	51.1	70' 1"	21.36		45.6	20 6	3	43.9	19 9	2
	70	21.34	42.4	60' 8"	18.49		37.3	16 9	2	35.6	16 1	2
	80	24.38	31.8	47' 5"	14.45		31.0	14 0	2	29.3	13 2	2
	90	27.43	16.0	24' 10"	7.58		26.0	11 7	2	24.3	11 0	2
100' (30.48 m)	25	7.62	77.6	97' 8"	29.77	80' (24.38 m)	131.4	59 6	6	129.7	58 8	6
	30	9.14	74.6	96' 5"	29.39		106.0	48 0	5	104.3	47 3	5
	35	10.67	71.6	94' 11"	28.93		88.4	40 0	4	86.7	39 3	4
	40	12.19	68.6	93' 1"	28.38		75.2	34 1	4	73.5	33 3	4
	50	15.24	62.3	88' 6"	26.99		57.3	25 9	3	55.6	25 2	3
	60	18.29	55.6	82' 6"	25.15		45.4	20 5	3	43.7	19 8	2
	70	21.34	48.3	74' 8"	22.77		37.1	16 8	2	35.4	16 0	2
	80	24.38	40.1	64' 5"	19.63		30.8	13 9	2	29.1	13 1	2
	90	27.43	30.1	50' 2"	15.30		26.0	11 7	2	24.3	11 0	2
	100	30.48	15.2	26' 3"	8.00		19.2	8 7	1	17.5	7 9	1
110' (33.53 m)	25	7.62	78.7	107' 11"	32.88	90' (27.43 m)	128.0	58 0	6	126.3	57 2	6
	30	9.14	76.1	106' 9"	32.54		105.7	47 9	5	104.0	47 1	5
	35	10.67	73.4	105' 5"	32.13		88.1	39 9	4	86.4	39 1	4
	40	12.19	70.6	103' 9"	31.63		74.9	33 9	4	73.2	33 2	4
	50	15.24	65.0	99' 8"	30.39		57.0	25 8	3	55.3	25 0	3
	60	18.29	59.1	94' 5"	28.77		45.1	20 4	3	43.4	19 6	2
	70	21.34	52.8	87' 8"	26.71		36.9	16 7	2	35.2	15 9	2
	80	24.38	45.9	79' 1"	24.10		30.6	13 8	2	28.9	13 1	2
	90	27.43	38.2	68' 0"	20.72		25.8	11 7	2	24.1	10 9	2
	100	30.48	28.7	52' 10"	16.10		21.9	9 9	2	20.2	9 1	2
110	33.53	14.5	27' 6"	8.39	16.2	7 3	2	14.5	6 5	1		

ⓐ ⓑ — Refer to page 2.

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ABS-238A lifting crane capacities

Refer to Notes page 4.

Main boom length	Load radius		Main boom angle	Main boom point height ^①		Main boom pendant lengths ^②	Permissible working loads ^③					
							Counterweight "AB"			Counterweight "AB"		
	Feet	meters	Degree	Feet	meters		Off main boom without tip extension mounted on boom		Parts of load hoist wire rope Required	Off main boom with tip extension mounted on boom		Parts of load hoist wire rope Required
							Lbs.	kg		Lbs.	kg	
120' (36.58 m)	30	9.14	77.2	117' 1"	35.68	100' (30.48 m)	101.1	45 8	5	99.4	45 0	5
	35	10.67	74.8	115' 10"	35.30		87.7	39 7	4	86.0	39 0	4
	40	12.19	72.3	114' 4"	34.85		74.6	33 8	4	72.9	33 0	4
	50	15.24	67.2	110' 8"	33.72		56.6	25 6	3	54.9	24 9	3
	60	18.29	61.9	105' 11"	32.27		44.8	20 3	3	43.1	19 5	2
	70	21.34	56.3	99' 11"	30.45		36.6	16 6	2	34.9	15 8	2
	80	24.38	50.4	92' 6"	28.18		30.3	13 7	2	28.6	12 9	2
	90	27.43	43.9	83' 2"	25.35		25.5	11 5	2	23.8	10 7	2
	100	30.48	36.5	71' 4"	21.74		21.6	9 7	2	19.9	9 0	2
	110	33.53	27.4	55' 4"	16.86		18.4	8 3	2	16.7	7 5	1
120	36.58	13.9	28' 9"	8.77	13.5	6 1	1	11.8	5 3	1		
130' (39.62 m)	30	9.14	78.2	127' 3"	38.80	110' (33.53 m)	85.6	38 8	4	83.9	38 0	4
	35	10.67	76.0	126' 2"	38.45		77.6	35 1	4	75.9	34 4	4
	40	12.19	73.7	124' 9"	38.03		70.9	32 1	4	69.2	31 3	3
	50	15.24	69.0	121' 5"	37.01		56.3	25 5	3	54.6	24 7	3
	60	18.29	64.2	117' 1"	35.69		44.4	20 1	3	42.7	19 3	2
	70	21.34	59.2	111' 9"	34.05		36.3	16 4	2	34.6	15 6	2
	80	24.38	54.0	105' 1"	32.04		30.0	13 6	2	28.3	12 8	2
	90	27.43	48.3	97' 1"	29.58		25.2	11 4	2	23.5	10 6	2
	100	30.48	42.1	87' 1"	26.55		21.3	9 6	2	19.6	8 8	2
	110	33.53	35.0	74' 7"	22.73		18.1	8 2	2	16.4	7 4	1
120	36.58	26.3	57' 8"	17.59	15.6	7 0	1	13.9	6 3	1		
130	39.62	13.3	30' 0"	9.14	11.2	5 0	1	9.5	4 3	1		
140' (42.67 m)	30	9.14	79.1	137' 6"	41.90	120' (36.58 m)	73.1	33 1	4	71.4	32 3	4
	35	10.67	77.0	136' 5"	41.58		66.8	30 2	3	65.1	29 5	3
	40	12.19	74.9	135' 2"	41.20		60.6	27 4	3	58.9	26 7	3
	50	15.24	70.6	132' 1"	40.25		50.1	22 7	3	48.4	21 9	3
	60	18.29	66.2	128' 1"	39.05		40.7	18 4	2	39.0	17 6	2
	70	21.34	61.6	123' 2"	37.55		34.4	15 6	2	32.7	14 8	2
	80	24.38	56.9	117' 3"	35.74		28.4	12 8	2	26.7	12 1	2
	90	27.43	51.8	110' 1"	33.56		24.0	10 8	2	22.3	10 1	2
	100	30.48	46.4	101' 5"	30.92		20.2	9 1	2	18.5	8 3	1
	110	33.53	40.5	90' 11"	27.70		17.7	8 0	2	16.0	7 2	1
120	36.58	33.7	77' 8"	23.67	15.2	6 8	1	13.5	6 1	1		
130	39.62	25.4	60' 0"	18.29	13.1	5 9	1	11.4	5 1	1		
140	42.67	12.8	31' 1"	9.48	9.1	4 1	1	7.4	3 3	1		
150' (45.72 m)	35	10.67	77.9	146' 8"	44.70	130' (39.62 m)	57.9	26 2	3	56.2	25 4	3
	40	12.19	75.9	145' 6"	44.35		52.5	23 8	3	50.8	23 0	3
	50	15.24	71.9	142' 7"	43.47		43.1	19 5	2	41.4	18 7	2
	60	18.29	67.9	139' 0"	42.36		35.7	16 1	2	34.0	15 4	2
	70	21.34	63.7	134' 6"	40.98		29.5	13 3	2	27.8	12 6	2
	80	24.38	59.3	129' 0"	39.33		24.4	11 0	2	22.7	10 2	2
	90	27.43	54.8	122' 7"	37.36		20.6	9 3	1	18.9	8 5	2
	100	30.48	50.0	114' 10"	35.01		17.4	7 8	1	15.7	7 1	1
	110	33.53	44.8	105' 8"	32.20		14.9	6 7	1	13.2	5 9	1
	120	36.58	39.0	94' 6"	28.80		13.1	5 9	1	11.4	5 1	1
130	39.62	32.5	80' 7"	24.57	11.4	5 1	1	9.7	4 3	1		
140	42.67	24.5	62' 2"	18.96	10.0	4 5	1	8.3	3 7	1		
150	45.72	12.4	32' 3"	9.82	7.2	3 2	1	5.5	2 4	1		

① Measured vertically from center of main boom head sheave to a line horizontal with boom foot pin center.

② Required pendant lengths — with or without boom tip extension.

③ Total suspended load — including load, hook block and/or other load handling gear.

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ABS-238A lifting crane capacities

Refer to Notes page 4.

Counterweight — 47,000 lbs. (21 319 kg) "AB" only.

Boom tip extension — angle; 10' (3.05 m) long.

Boom — angle; 48' x 48" (1.22 m x 1.22 m) with boom live mast and 1 3/4" (44 mm) diameter boom pendants.

Main boom length	Load radius		Main boom angle Degree	Boom tip extension point height [ⓐ]		Permissible working loads [ⓑ]	
	Feet	meters		Feet	meters	Counterweight "A" or "AB" Pounds	Capacities with single part load hoist rope kilograms
110' (33.53 m)	30	9.14	78.6	115' 10"	35.32	10.0	4.5
	35	10.67	76.1	114' 8"	34.96	10.0	4.5
	40	12.19	73.6	113' 2"	34.50	10.0	4.5
	50	15.24	68.5	109' 7"	33.40	10.0	4.5
	60	18.29	63.1	104' 9"	31.94	10.0	4.5
	70	21.34	57.5	98' 10"	30.14	10.0	4.5
	80	24.38	51.5	91' 4"	27.85	10.0	4.5
	90	27.43	44.9	82' 1"	25.02	10.0	4.5
	100	30.48	37.4	70' 2"	21.39	10.0	4.5
	110	33.53	28.2	54' 0"	16.45	10.0	4.5
		30	9.14	79.5	126' 1"	38.43	10.0
	35	10.67	77.2	125' 0"	38.10	10.0	4.5
	40	12.19	74.9	123' 8"	37.70	10.0	4.5
	50	15.24	70.2	120' 3"	36.66	10.0	4.5
	60	18.29	65.4	116' 0"	35.35	10.0	4.5
	70	21.34	60.3	110' 8"	33.74	10.0	4.5
	80	24.38	55.0	104' 1"	31.72	10.0	4.5
	90	27.43	49.3	96' 0"	29.26	10.0	4.5
	100	30.48	43.0	86' 1"	26.24	10.0	4.5
	110	33.53	35.8	73' 4"	22.37	10.0	4.5
	120	36.58	27.0	56' 4"	17.19	10.0	4.5
	35	10.67	78.2	135' 3"	41.23	10.0	4.5
	40	12.19	76.0	134' 0"	40.84	10.0	4.5
	50	15.24	71.6	131' 0"	39.92	10.0	4.5
	60	18.29	67.3	127' 0"	38.70	10.0	4.5
	70	21.34	62.7	122' 2"	37.24	10.0	4.5
	80	24.38	57.9	116' 2"	35.41	10.0	4.5
	90	27.43	52.8	109' 1"	33.25	10.0	4.5
	100	30.48	47.3	100' 4"	30.60	10.0	4.5
	110	33.53	41.3	89' 9"	27.37	10.0	4.5
	120	36.58	34.4	76' 6"	23.31	10.0	4.5
	130	39.62	26.0	58' 7"	17.86	9.5	4.3
	35	10.67	79.0	145' 6"	44.34	10.0	4.5
	40	12.19	77.0	144' 4"	44.01	10.0	4.5
	50	15.24	73.0	141' 6"	43.12	10.0	4.5
	60	18.29	68.9	137' 10"	42.03	10.0	4.5
	70	21.34	64.7	133' 4"	40.66	10.0	4.5
	80	24.38	60.3	128' 0"	39.01	10.0	4.5
	90	27.43	55.7	121' 6"	37.03	10.0	4.5
	100	30.48	50.8	113' 9"	34.68	10.0	4.5
	110	33.53	45.6	104' 7"	31.88	10.0	4.5
	120	36.58	39.8	93' 4"	28.46	9.4	4.2
	130	39.62	33.2	79' 4"	24.20	8.3	3.7
	140	42.67	25.0	60' 9"	18.53	7.4	3.3

(continued)

Main boom length	Load radius		Main boom angle Degree	Boom tip extension point height [ⓐ]		Permissible working loads [ⓑ]		
	Feet	meters		Feet	meters	Counterweight "A" or "AB" Pounds	Capacities with single part load hoist rope kilograms	
50' (15.24 m)	20	6.10	76.7	56' 7"	17.25	10.0	4.5	
	25	7.62	71.6	55' 0"	16.79	10.0	4.5	
	30	9.14	66.3	52' 9"	16.09	10.0	4.5	
	35	10.67	60.7	50' 1"	15.27	10.0	4.5	
	40	12.19	54.8	46' 7"	14.20	10.0	4.5	
	50	15.24	41.2	36' 10"	11.24	10.0	4.5	
	60' (18.29 m)	20	6.10	76.7	66' 10"	20.39	10.0	4.5
		25	7.62	74.4	65' 6"	19.96	10.0	4.5
		30	9.14	70.0	63' 8"	19.41	10.0	4.5
		35	10.67	65.4	61' 6"	18.74	10.0	4.5
		40	12.19	60.6	58' 8"	17.89	10.0	4.5
50		15.24	50.2	51' 3"	15.63	10.0	4.5	
60		18.29	37.8	40' 2"	12.25	10.0	4.5	
70' (21.34 m)		25	7.62	76.4	76' 0"	23.16	10.0	4.5
		30	9.14	72.6	74' 4"	22.67	10.0	4.5
		35	10.67	68.7	72' 6"	22.09	10.0	4.5
		40	12.19	64.7	70' 2"	21.39	10.0	4.5
	50	15.24	56.2	64' 1"	19.53	10.0	4.5	
	60	18.29	46.6	55' 7"	16.94	10.0	4.5	
	70	21.34	35.1	43' 3"	13.19	10.0	4.5	
	80' (24.38 m)	25	7.62	78.0	86' 3"	26.30	10.0	4.5
		30	9.14	74.7	84' 10"	25.87	10.0	4.5
		35	10.67	71.2	83' 2"	25.35	10.0	4.5
		40	12.19	67.8	81' 2"	24.74	10.0	4.5
50		15.24	60.5	76' 0"	23.16	10.0	4.5	
60		18.29	52.6	69' 0"	21.03	10.0	4.5	
70		21.34	43.7	59' 7"	18.16	10.0	4.5	
80		24.38	32.9	46' 2"	14.08	10.0	4.5	
90' (27.43 m)		25	7.62	79.2	96' 6"	29.41	10.0	4.5
		30	9.14	76.3	95' 3"	29.04	10.0	4.5
		35	10.67	73.2	93' 9"	28.59	10.0	4.5
	40	12.19	70.1	92' 0"	28.04	10.0	4.5	
	50	15.24	63.8	87' 6"	26.67	10.0	4.5	
	60	18.29	57.0	81' 6"	24.84	10.0	4.5	
	70	21.34	49.6	73' 8"	22.46	10.0	4.5	
	80	24.38	41.3	63' 3"	19.29	10.0	4.5	
	90	27.43	31.1	49' 0"	14.93	10.0	4.5	
	100' (30.48 m)	30	9.14	77.5	105' 7"	32.18	10.0	4.5
		35	10.67	74.8	104' 3"	31.79	10.0	4.5
40		12.19	72.0	102' 8"	31.30	10.0	4.5	
50		15.24	66.4	98' 7"	30.05	10.0	4.5	
60		18.29	60.4	93' 4"	28.46	10.0	4.5	
70		21.34	54.0	86' 7"	26.42	10.0	4.5	
80		24.38	47.1	78' 0"	23.77	10.0	4.5	
90		27.43	39.2	66' 10"	20.39	10.0	4.5	
100		30.48	29.5	51' 7"	15.72	10.0	4.5	

ⓐ Refer to page 4.

GENERAL INFORMATION ONLY

ABS-238A lifting crane capacities

Refer to Notes below.

Main boom length	Load radius		Main boom angle	Boom tip extension point height [Ⓜ]		Permissible working loads [Ⓢ] off boom tip extension	
						Counterweight "A" or "AB"	
	Capacities with single part load hoist rope		Pounds	kilograms			
	Feet	meters			Degree	Feet	meters
150' (45.72 m)	35	10.67	79.7	155' 8"	47.45	10.0	4 5
	40	12.19	77.8	154' 7"	47.12	10.0	4 5
	50	15.24	74.1	152' 0"	46.32	10.0	4 5
	60	18.29	70.3	148' 7"	45.29	10.0	4 5
	70	21.34	66.4	144' 6"	44.04	10.0	4 5
	80	24.38	62.3	139' 6"	42.51	10.0	4 5
	90	27.43	58.2	133' 7"	40.72	10.0	4 5
	100	30.48	53.7	126' 7"	38.58	10.0	4 5
	110	33.53	49.1	118' 4"	36.08	8.8	3 9
	120	36.58	44.0	108' 7"	33.10	7.8	3 5
	130	39.62	38.5	96' 10"	29.53	6.8	3 0
	140	42.67	32.1	82' 3"	25.08	6.0	2 7
	150	45.72	24.2	62' 10"	19.17	5.5	2 4

[Ⓢ]Total suspended load — including load, hook block and/or other load handling gear.

[Ⓜ]Measured vertically from center of boom tip head sheave to a line horizontal with boom foot pin center.

Notes — lifting crane capacities

- Capacities shown are in thousand pound and thousand kilogram units and represent maximum allowable loads based on strength capabilities of the machine, at zero degree list.
- Capacities are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stopping of loads, supporting surface conditions, and operating speeds. Operator must reduce permissible working load ratings to take such conditions into account. Deduction from rated capacities must be made for weight of hook block, weighted ball/hook, sling, spreader bar, or other suspended gear.
- Boom tip shall not be more than 5' (1.52 m) below boomfeet.
- Wire rope used to handle each rated load must be 1" (25 mm) diameter with minimum breaking strength of 103,400 lbs. (46 902 kg) and must be used in the number of parts of line indicated.
- The 30' 0" (9.14 m) boom live mast must be used for all capacities on this chart.
- Maximum capacity of 10' (3.05 m) boom tip extension is 10,000 lbs. (4 536 kg) regardless of boom length. This capacity applies only when the 10,000 lbs. (4 536 kg) is within the rated lifting capacity of the machine.
- Boom angles shown do not apply when handling loads on boom tip extension. When lifting loads on the boom tip extension, load radius must be known — do not determine load radius by boom angle.
- Boom tip extension must be fixed in working position 15° offset from centerline of boom.
- Do not lift load on boom tip extension when main cargo hook is in use.
- Loads are within the requirements for certification of the construction and survey of cargo gear on merchant vessels by the American Bureau of Shipping per 1969 revisions.
- FMC Corporation assumes no responsibility for proper design and construction of the supporting structure to withstand the loadings imposed by the machine — nor proper attachment of the turntable bearing mounting base on the supporting structure.
- These capacities apply to the machine only as originally manufactured and normally equipped by FMC Corporation, Cable Crane & Excavator Division.

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We are constantly improving our products and therefore reserve the right to change designs and specifications.



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