

Wire Rope Specifications

Liftcrane - Boom No. 82 or 22EL

Luffing Jib No. 135 Attached

999 SERIES 1, 2, 3

European
Standards

WIRE ROPE LENGTHS - FRONT DRUM						
Boom Length		Hoist Line Front Drum		Maximum Required Parts of Line		
				999 SERIES		
Ft.	Meters	Ft.	Meters	1	2	3
70	21.3	1175	358	13	14	14
80	24.4	1225	373	12	13	13
90	27.4	1275	389	10	12	12
100	30.5	1300	396	9	11	11
110	33.5	1300	396	8	10	10
120	36.6	1425	434	7	9	10
130	39.6	1425	434	6	8	9
140	42.7	1500	457	6	7	9
150	45.7	1500	457	5	7	8
160	48.8	1500	457	5	6	7
170	51.8	1500	457		6	7
180	54.9	1500	457		6	6
190	57.9	1500	457		4	4

HOIST REEVING FOR MAIN LOAD BLOCK FRONT DRUM					
Parts of Line	Maximum Load		Parts of Line	Maximum Load	
	Lbs.	kg		Lbs.	kg
1	29,500	13 380	8	236,000	107 050
2	59,000	26 760	9	265,500	120 430
3	88,500	40 140	10	295,000	133 810
4	118,000	53 520	11	324,500	147 190
5	147,500	66 900	12	354,000	160 570
6	177,000	80 290	13	383,500	173 950
7	206,500	93 670	14	394,200	178 800

WIRE ROPE LENGTHS - AUXILIARY DRUM						
Boom Length		Hoist Line Auxiliary Drum		Maximum Required Parts of Line		
				999 SERIES		
Ft.	Meters	Ft.	Meters	1	2	3
80	24.4	1475	450	14	14	16
90	27.4	1650	503	14	14	16
100	30.5	1825	556	13	14	16
110	33.5	1900	579	11	14	15
120	36.6	2025	617	11	14	15
130	39.6	2025	617	9	12	13
140	42.7	2025	617	8	10	12
150	45.7	2025	617	8	10	11
160	48.8	2025	617	7	9	11
170	51.8	2025	617		9	10
180	54.9	2025	617		8	9
190	57.9	2025	617		4	4

HOIST REEVING FOR MAIN LOAD BLOCK AUXILIARY DRUM					
Parts of Line	Maximum Load		Parts of Line	Maximum Load	
	Lbs.	kg		Lbs.	kg
1	20,000	9 070	9	180,000	81 650
2	40,000	18 140	10	200,000	90 720
3	60,000	27 220	11	220,000	99 790
4	80,000	36 290	12	240,000	108 860
5	100,000	45 360	13	260,000	117 930
6	120,000	54 430	14	280,000	127 010
7	140,000	63 500	15	300,000	136 080
8	160,000	72 570	16	320,000	145 150

Note: Hoist line lengths given in tables will allow hook to touch ground. When block travel below ground is required, add additional rope equal to parts of line times added travel distance. Hoisting distance or line pull may be limited when block travel below ground is required.

Maximum block travel will be restricted when hoist line length exceeds 1,600 Ft. (488m) using auxiliary drum. Auxiliary drum can not be used with 70 Ft. (21.3m) boom length.

Capacity chart restrictions will occur when auxiliary drum is used. Maximum capacity is 320,000 Lbs. (145 150 kg) with 16 parts line.



Wire Rope Specifications

999 SERIES 1, 2, 3

Liftcrane - Boom No. 82 or 22EL

Luffing Jib No. 135 Attached

European
Standards

Wire Rope Specifications

Rotation Resistant Wire Rope - 5:1 Safety Factor

Hoist Line: 26 mm - 2 160 N/mm² Wire Rope With Pad Eye (MCC Part No. 719430)
Right Hand Regular Lay
Minimum Breaking Strength = 161,200 Lbs. (717.0 kN)
Approx. Weight = 2.13 Lbs Per Ft. (3.17 kg/m)
No Load Dia. = 1.033 in. (26.24 mm) to 1.045 in. (26.54 mm)

Or

26 mm - Wire Rope With Pad Eye (MCC Part No. 719432)
Right Hand Lang Lay
Minimum Breaking Strength = 156,400 Lbs. (695.7 kN)
Approx. Weight = 2.39 Lbs Per Ft. (3.56 kg/m)
No Load Dia. = 1.034 in. (26.26 mm) to 1.054 in. (26.77 mm)

Hoist Line: 26 mm - 1 960 N/mm² Wire Rope (MCC Part No. 719378)
(Auxiliary Drum) Right Hand Regular Lay
Minimum Breaking Strength Required = 100,000 Lbs. (445.0 kN)
Maximum Load = 20,000 Lbs. (9 070 kg) Per Line
Approx. Weight = 2.13 Lbs. Per Ft. (3.17 kg/m)
No Load Dia. (required for lagging) = 1.033 in. (26.24 mm) to 1.045 in. (26.54 mm)

Or

26 mm - Wire Rope With Pad Eye (MCC Part No. 719432)
Right Hand Lang Lay
Minimum Breaking Strength Required = 100,000 Lbs. (445.0 kN)
Maximum Load = 20,000 Lbs. (9 070 kg) Per Line
Approx. Weight = 2.39 Lbs. Per Ft. (3.56 kg/m)
No Load Dia. (required for lagging) = 1.034 in. (26.26 mm) to 1.054 in. (26.77 mm)

Maximum Spooling Capacities

Front Drum: 26 mm Wire Rope - 7 Layers - 1,727 Ft. (526m)
(Hoist Line)

Auxiliary Drum: 26 mm Wire Rope - 6 Layers - 1,323 Ft. (403m)
(Hoist Line) 6 Layers - 1,415 Ft. (431m) with 21-1/4 in. (540 mm) Dia. Lagging

17 Ft. (5m) is deducted from maximum spooling capacities for 3 dead wraps per drum or lagging.

Note: When optional laggings are used, the recommended lagging for specific wire rope dia. must be used.

Refer to drum and lagging chart **No. 8222-A**.