



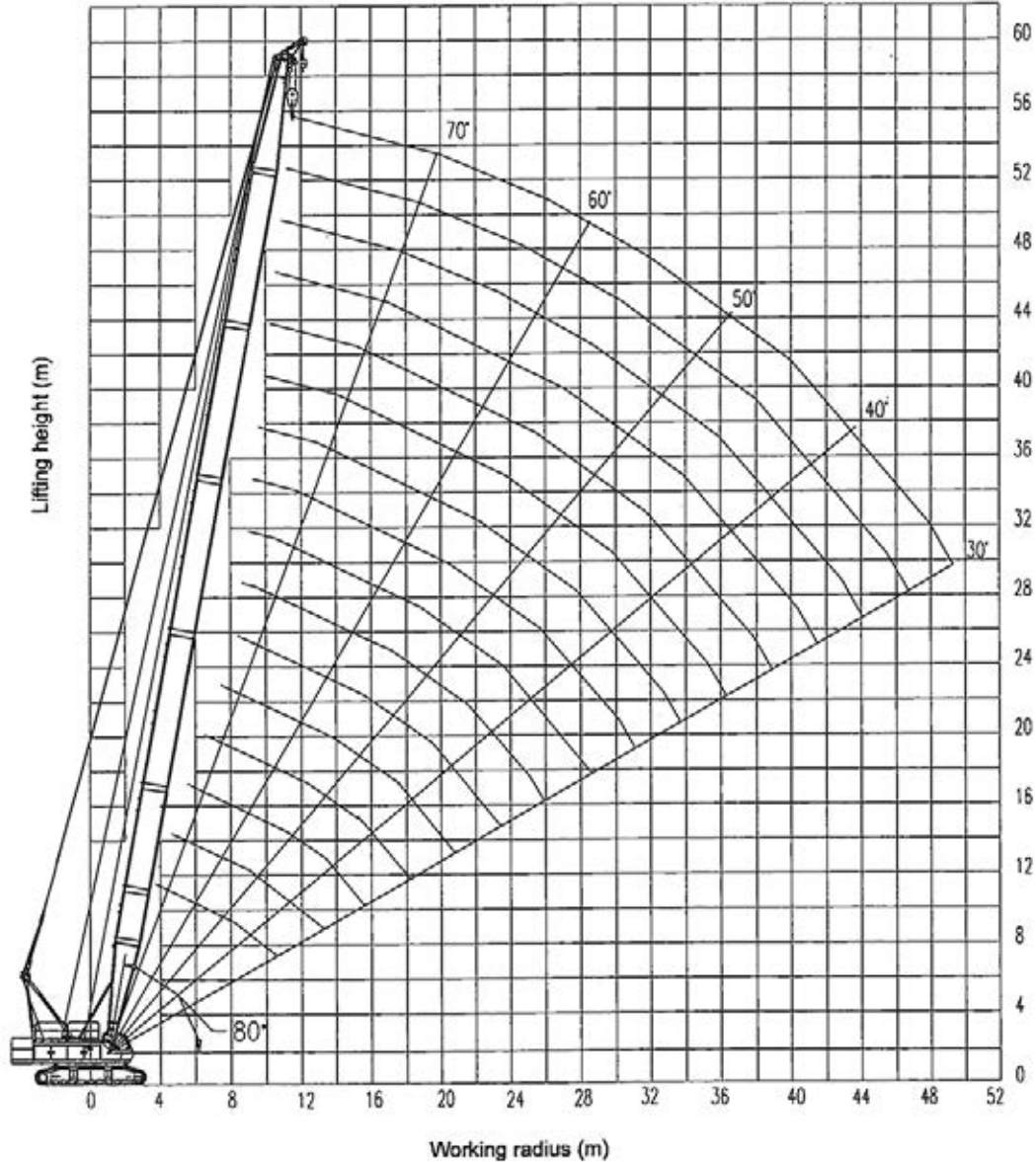
LIFTING CHARTS - Crawler Cranes

ZOOMLION MODEL QUY80 - 85 TON CAPACITY



Note: The main boom lifting height curve is drawn without considering boom deflection.

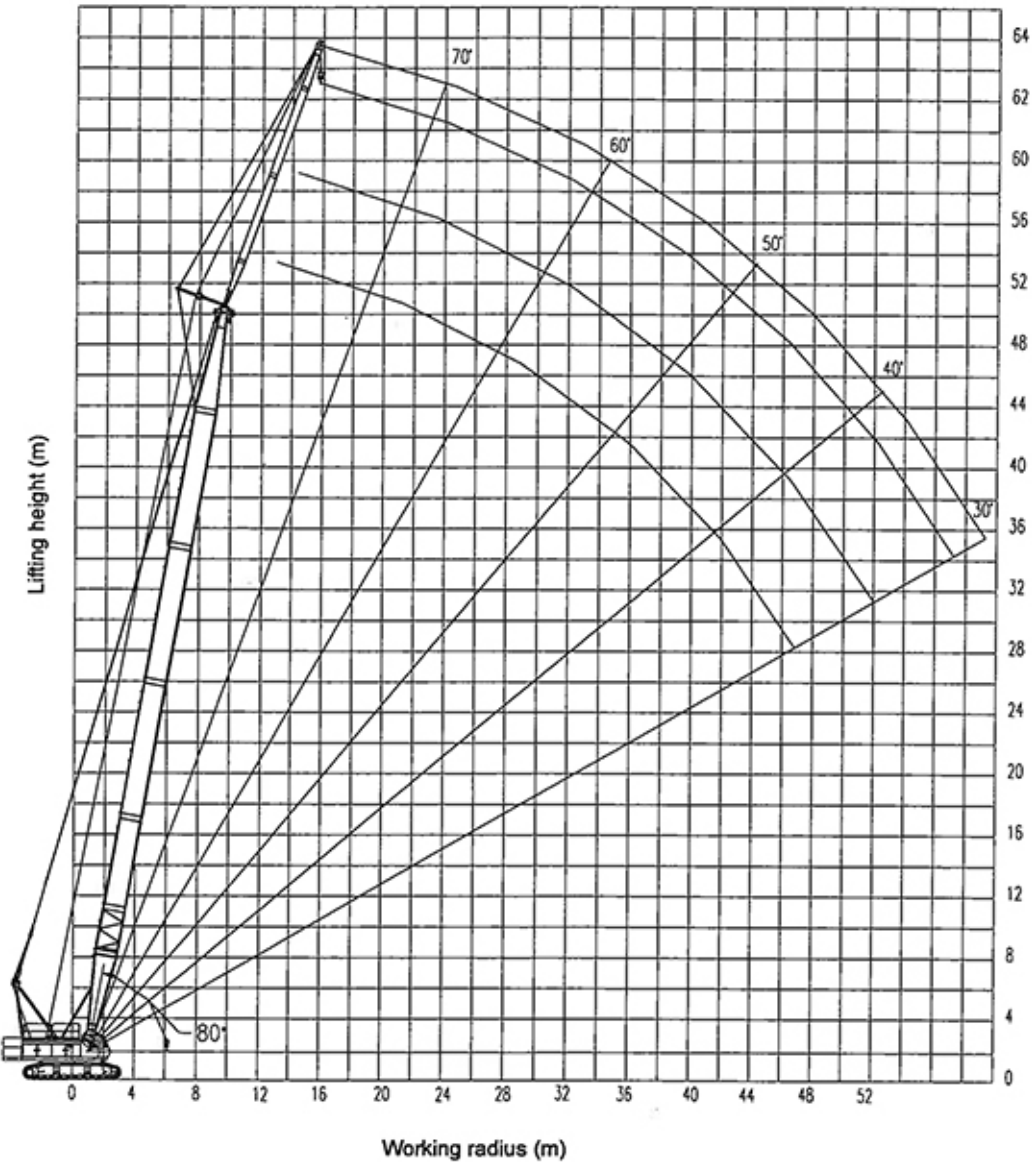
2.4.4.1 Lifting height on S boom



Note:

1. The horizontal direction indicates working radius (in m) and the vertical direction indicates lifting height (in m).
2. For S boom configuration, S= 13m ~ 58m.

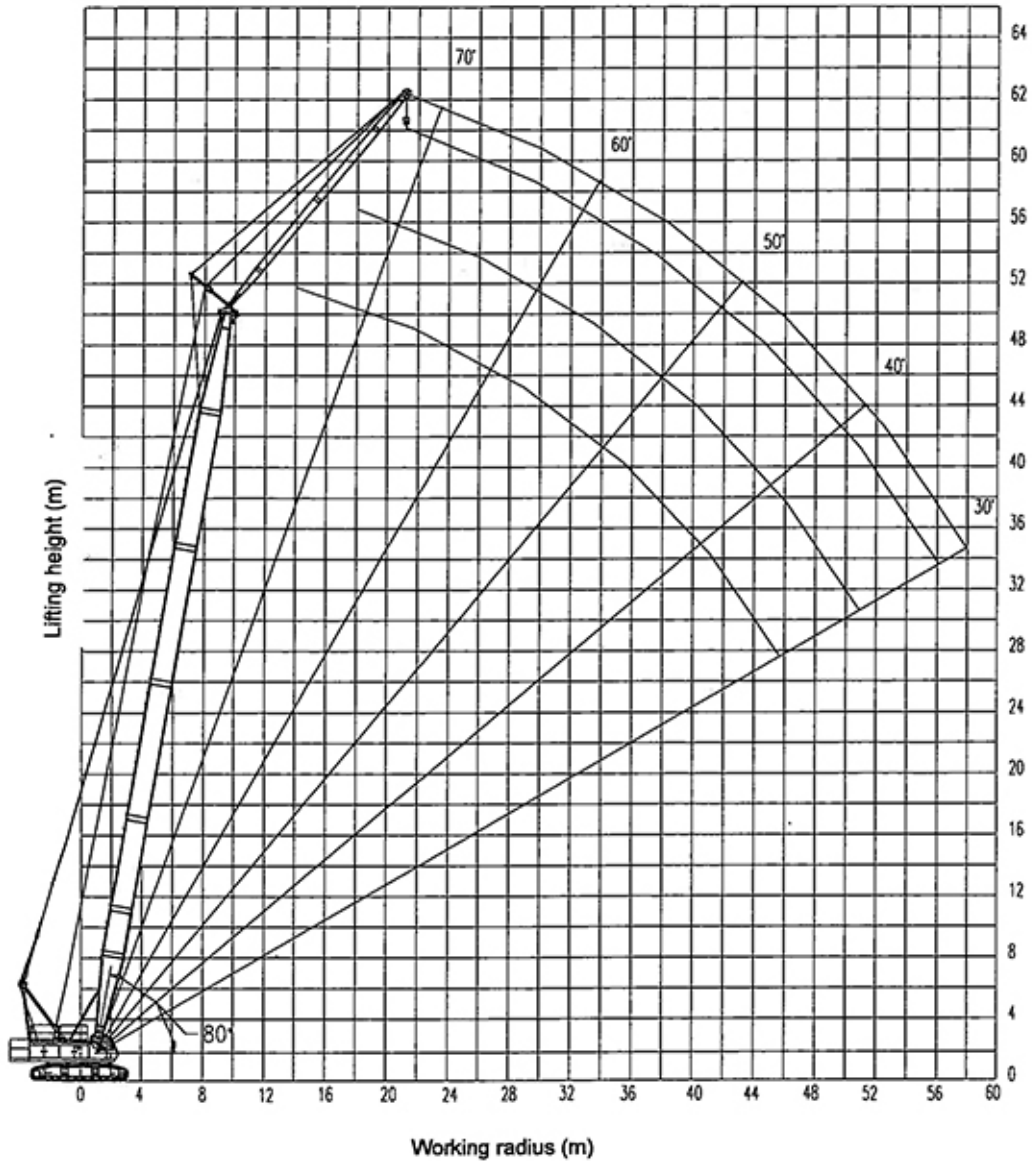
2.4.4.2 Lifting height on SF boom/fixed jib combination



Note:

1. The horizontal direction indicates working radius (in m) and the vertical direction indicates lifting height (in m).
2. For SF boom configuration, S= 37m ~ 49m, F= 6m ~ 18m, and F-jib angle = 10°.

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Note:

1. The horizontal direction indicates working radius (in m) and the vertical direction indicates lifting height (in m).
2. For SF boom configuration, S= 37m ~ 49m, F= 6m ~ 18m, and F-jib angle = 30°.

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2.4.5 Lifting capacity chart

Note: The lifting capacity is given in "t", and "*/" indicates "lifting capacity/radius".

2.4.5.1 Lifting capacity on S boom

Unit: t

		Length of S (m)									
Radius (m)	13	16	19	22	25	28	31	34	37	Radius (m)	
4.3	80									4.3	
5	68	66.8								5	
6	52.3	52	51.8	51.7						6	
7	42.3	42	41.9	41.7	41.4	40.72				7	
8	35.5	35.2	35	34.8	34.6	33.97	33.8	33.5		8	
9	30.5	30.2	30	29.8	29.5	29	28.8	28.6	28.4	9	
10	26.7	26.4	26.2	26	25.7	25.3	25	24.8	24.6	10	
12	21.2	20.9	20.7	20.6	20.3	19.9	19.7	19.4	19.2	12	
14		17.2	17	16.9	16.6	16.2	16	15.8	15.5	14	
16			14.37	14.2	13.9	13.6	13.4	13.1	12.9	16	
18				12.2	11.9	11.6	11.4	11.1	11	18	
20					10.3	10	9.8	9.6	9.4	20	
22					9	8.8	8.6	8.3	8.1	22	
24						7.7	7.5	7.3	7	24	
26							6.7	6.4	6.2	26	
28								5.6	5.4	28	
30								4.9	4.7	30	
32									4.2	32	

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Length of S(m)								
Radius (m)	40	43	46	49	52	55	58	Radius (m)
9								9
10	23.8	23.2	22.6					10
12	19	18.6	18.2	17.8	17.8			12
14	15.5	15.2	15	14.75	14.5	14.3	14	14
16	12.8	12.7	12.5	12.3	12.1	12	11.5	16
18	10.9	10.7	10.5	10.3	10.2	10	9.9	18
20	9.4	9.3	9.2	9	9	8.8	8.6	20
22	8.5	8.3	8.1	8	8	7.7	7.5	22
24	7.4	7.2	7.1	7	7	6.8	6.6	24
26	6.6	6.5	6.5	6.2	6	6	5.7	26
28	5.8	5.7	5.6	5.6	5.5	5.4	5.1	28
30	5.3	5	5.1	5.1	4.8	4.6	4.5	30
32	4.8	4.7	4.6	4.5	4.3	4.1	3.8	32
34	4.1	4.1	4	4	3.8	3.7	3.4	34
36	4	3.8	3.7	3.5	3.4	3.2	2.9	36
38		3.2	3.2	3.2	2.9	2.9	2.6	38
40		3	3	2.7	2.6	2.5	2.3	40
42				2.5	2.3	2.3	2	42
44					2	2	1.6	44
46						1	1.3	46
48						1.5	1	48
50						1.2	0.8	50

2.4.5.2 Lifting capacity on SF boom

Unit: t

Length of S (m)	37						40							
	6		12		18		6		12		18			
Length of F (m)	Fixed jib angle(°)													
Radius (m)	10	30	10	30	10	30	10	30	10	30	10	30	Radius (m)	
10	7	6					7						10	
12	7	6	7				7		6	7			12	
14	7	6	7		5.5		7		6	7	5.5		14	
16	7	6	7	6	5.5		7		6	7	5.5		16	
18	7	6	7	6	5.5		7		6	7	5.5		18	
20	7	6	7	6	5.5	4	7		6	7	5.5	4	20	
22	7	6	7	6	5.5	4	7		6	7	5.5	4	22	
24	7	6	7	6	5.5	4	7		6	7	5.5	4	24	
26	6.7	6	6.7	6	5.5	4	6.4		6	6.1	5.4	4	26	
28	6.1	5.5	6.1	5.5	5.5	3.5	5.5		5.5	5.5	4.8	5	28	
30	5.4	4.8	5.4	4.8	5	3.5	5.2		5	5	4.2	5	30	
32	4.9	4.4	4.9	4.4	4	3.3	4.4		4.3	4.3	4	4	32	
34	4.3	4	4.3	4	4	3.2	4		3.9	3.9	4	4	34	
36			3.9	3.7	3.7	3.2	3.6		3.5	3.5	3.5	3.8	36	
38			3.5	3.4	3.5	3.1			3.1	3.2	3	3.2	38	
40				3.2	3.2	3				2.7	2.7	2.6	40	
42											2.4	2.5	2.3	42

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Length of S (m)	43						46						Length of S (m)		
	6		12		18		6		12		18				
Length of F (m)	Fixed jib angle(°)												Length of F (m)		
Radius (m)	10	30	10	30	10	30	10	30	10	30	10	30	10	30	Radius (m)
12	7								7						12
14	7	6	7						7	6	7				14
16	7	6	7	6	5.5				7	6	7		5.5		16
18	7	6	7	6	5.5				7	6	7	6	5.5		18
20	7	6	7	6	5.5	4			7	6	7	6	5.5		20
22	7	6	7	6	5.5	4			7	6	7	6	5.5	4	22
24	7	6	7	6	5.5	4			6.5	6	7	6	5.5	4	24
26	6.3	5.5	6.3	6	5.5	4			6	5.8	5.9	5.7	5.5	4	26
28	5.5	4.7	5.5	5.4	5.4	4			5	4.9	5	4.9	5	4	28
30	4.8	4.3	4.8	4.7	5	4			4.7	4.6	4.6	4.5	4.8	4	30
32	4.2	4.2	4.2	4.1	4.5	4			4	4.3	4	4	4.4	3.8	32
34	4	4	4	4	4	3.5			4	3.7	4	3.7	3.8	3.5	34
36	3.6	3.6	3.7	3.6	3.6	3.5			3.5	3.5	3.5	3.5	3.5	3.3	36
38	3.3		3.3	3.4	3.4	3.3			3.2	3.2	3.2	3.2	3.2	3.2	38
40			3.1	3	3.1	3.1			2.9	2.9	2.9	3	3	3	40
42			2.7	2.7	2.7	2.7				2.6	2.5	2.6	2.5	2.5	42
44				2.5	2.5	2.5				2.5	2.4	2.5	2.4	2.4	44

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Length of S (m)	49						Length of S (m)
Length of F (m)	6		12		18		Length of F (m)
Fixed jib angle(°)							
Radius (m)	10	30	10	30	10	30	Radius (m)
12	7						12
14	7	6	7				14
16	7	6	7		5.5		16
18	7	6	7	6	5.5		18
20	7	6	7	6	5.5		20
22	7	6	7	6	5.5	4	22
24	6.5	6	6.5	6	5.5	4	24
26	5.7	5.5	5.7	5.5	5.5	4	26
28	5.1	5	5	5	4.9	4	28
30	4.5	4.4	4.6	4.4	4.5	4	30
32	4	4	4	4	4	3.7	32
34	4	4	3.6	3.6	3.5	3.5	34
36	3.4	3.3	3.3	3.4	3.2	3.3	36
38	3	3	3	3.2	3	3.2	38
40	2.8	2.8	2.8	2.8	2.8	3	40
42	2.5	2.5	2.5	2.5	2.5	2.7	42
44		2.2	2.2	2.3	2.3	2.3	44
46			1.9	1.9	1.9	1.8	46

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Length of S (m)	49						Length of S (m)
Length of F (m)	6		12		18		Length of F (m)
Fixed jib angle(°)							
Radius (m)	10	30	10	30	10	30	Radius (m)
12	7						12
14	7	6	7				14
16	7	6	7		5.5		16
18	7	6	7	6	5.5		18
20	7	6	7	6	5.5		20
22	7	6	7	6	5.5	4	22
24	6.5	6	6.5	6	5.5	4	24
26	5.7	5.5	5.7	5.5	5.5	4	26
28	5.1	5	5	5	4.9	4	28
30	4.5	4.4	4.6	4.4	4.5	4	30
32	4	4	4	4	4	3.7	32
34	4	4	3.6	3.6	3.5	3.5	34
36	3.4	3.3	3.3	3.4	3.2	3.3	36
38	3	3	3	3.2	3	3.2	38
40	2.8	2.8	2.8	2.8	2.8	3	40
42	2.5	2.5	2.5	2.5	2.5	2.7	42
44		2.2	2.2	2.3	2.3	2.3	44
46			1.9	1.9	1.9	1.8	46

2.4.2 Type of load hook and selection of rope reeving

Type of load hook	Maximum rope reeving	Weight of load hook (kg)
80t	12	1250
50t	7	750
30t	4	550
6 t	1	240



Note:

The specification of load hook in above table is not the standard load hook configuration. It is subject to the contract signed with customer.

2.4.3 Rope reeving and specification of wire rope

2.4.3.1 Rope reeving for different boom length

	Boom length (m)	Rated lifting capacity (t)	Rope reeving
Crane operation with main boom	13	80	12
	16	66.8	11
	19	51.8	10
	22	51.7	8
	25	41.5	7
	28	40.7	6
	31	33.8	6
	34	33.5	5
	37	28.4	5
	40	23.8	4
	43	23.2	4
	46	22.6	3
	49	17.8	3
	52	17.8	3
	55	14.3	3
58	14	2	
Crane operation with main boom and fixed jib	6~18	7	1



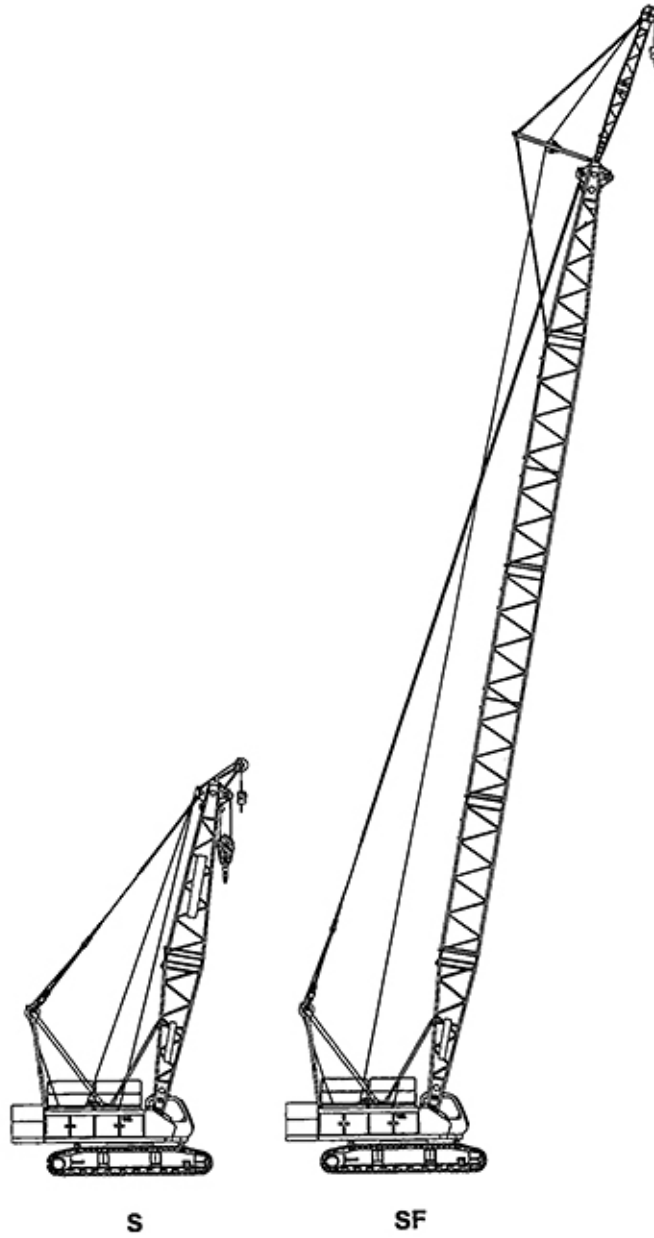
Note:

If crane is working with rope reeving less than the value listed in the above table, the single hoisting rope load must be checked to make sure that the max. permissible load of single hoisting rope is not exceeded.

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2.2 Terminology

2.2.1 Boom configuration



Instructions for boom configuration

Configuration no.	Description	Parameters
S	Main boom	S = 13~58m
SF	Main boom with fixed jib	S = 37~49m F = 6~18m

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2.3.3 Overall dimensions (unit: mm)

