

Contents list Volume 1

Chapter 1

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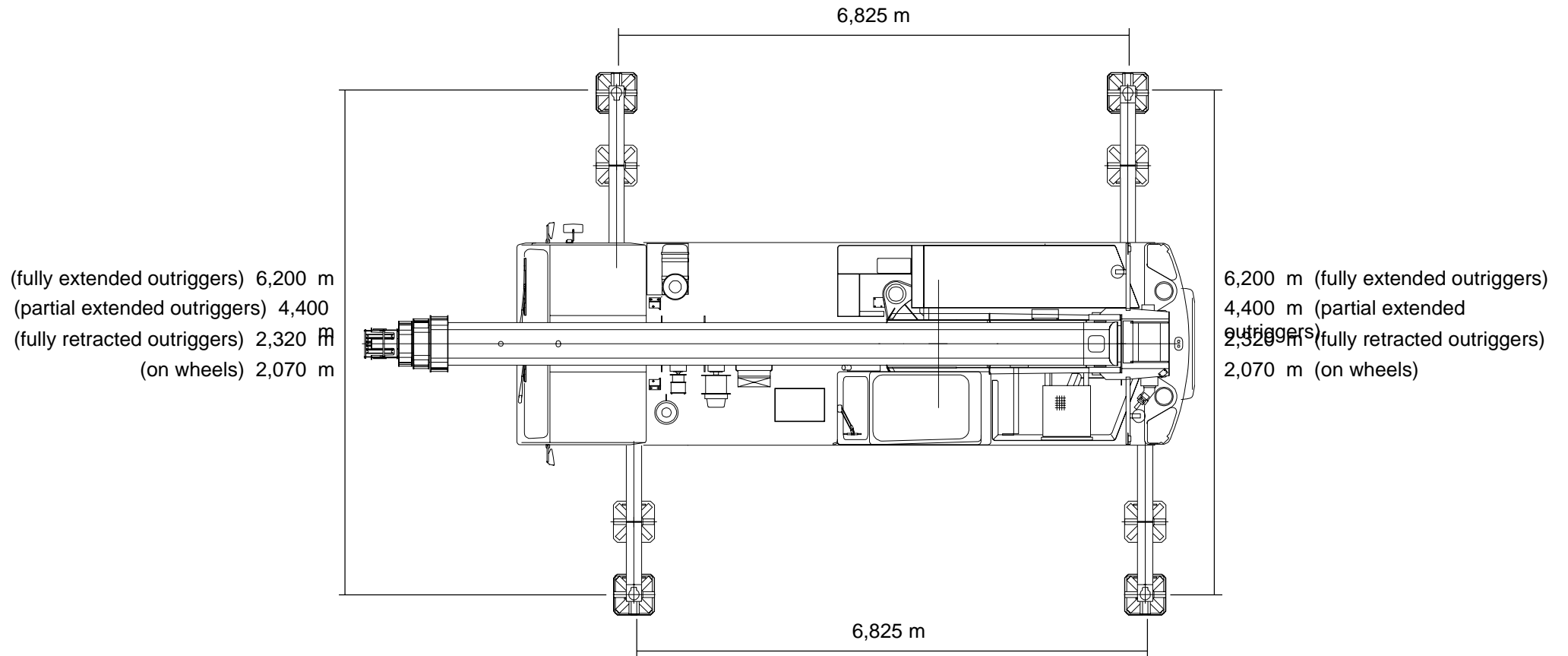
Chapter 2 Main boom

ID-Nr. 3 090 856

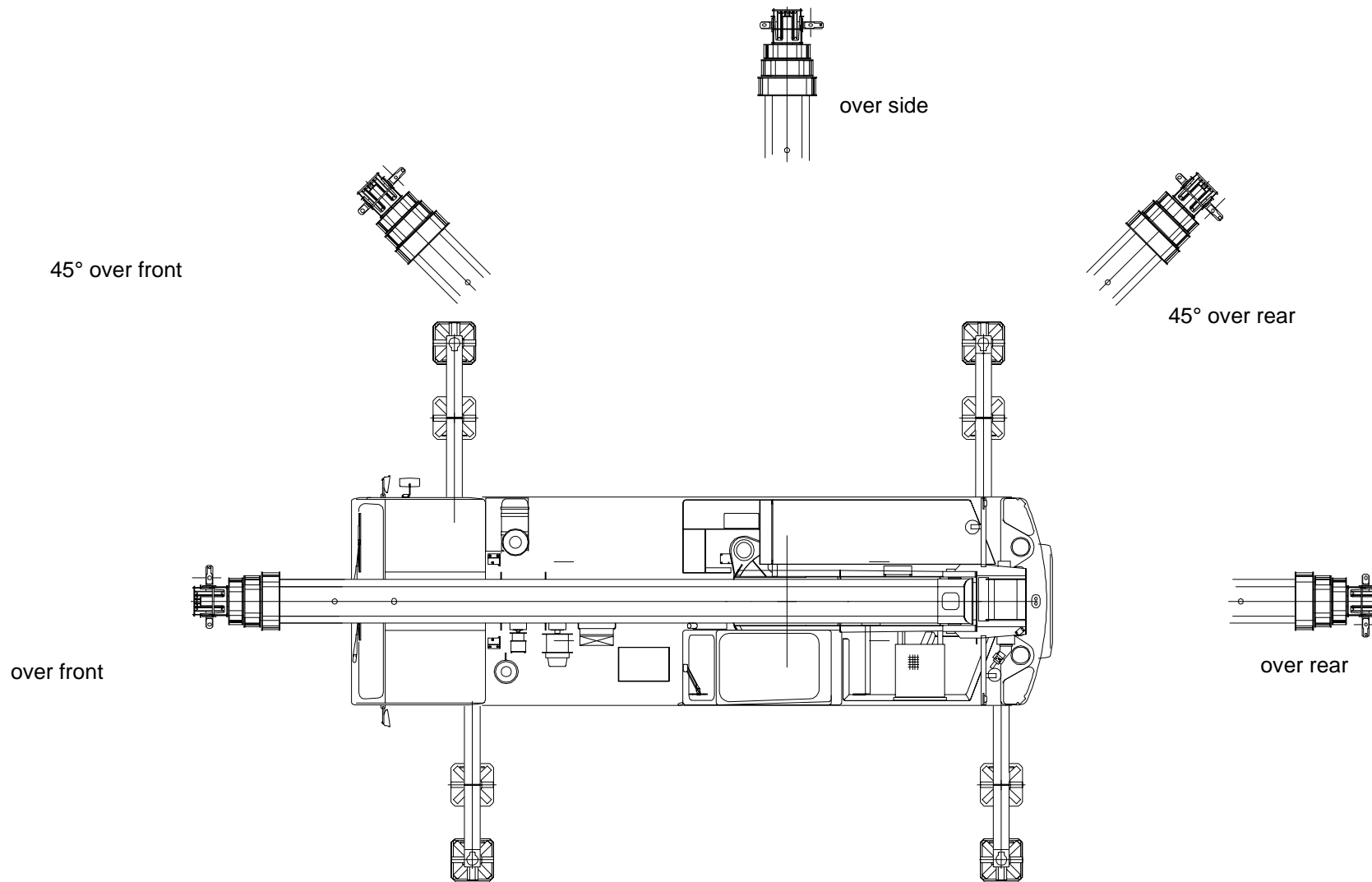
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Main boom - fixed length	outrigger base 6,825 x 4,400 m	7,6 t counterweight	Reference chart 3 085 164 Outrigger Load Chart	2 - 561 to 2 - 566	2 - 565 to 2 - 616
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Main boom - fixed length	outrigger base 6,825 x 2,320 m	7,6 t counterweight	Reference chart 3 085 207 Outrigger Load Chart	2 - 685 to 2 - 688	2 - 687 to 2 - 698
Main boom - fixed length	outrigger base 6,825 x 2,320 m	6,6 t counterweight	Reference chart 3 085 208 Outrigger Load Chart	2 - 699 to 2 - 702	2 - 701 to 2 - 712
Main boom - fixed length	outrigger base 3,615 x 2,070 m	7,6 t counterweight	Reference chart 3 085 167 Outrigger Load Chart	2 - 713 to 2 - 716	2 - 715 to 2 - 720
Main boom - fixed length	outrigger base 3,615 x 2,070 m	6,6 t counterweight	Reference chart 3 085 169 Outrigger Load Chart	2 - 721 to 2 - 724	2 - 723 to 2 - 730

Overview of outrigger bases



Overview of boom positions



Remarks to outrigger load charts

The outrigger load charts are based on capacity charts acc. to prEN 13000 (DIN / ISO)

With below mentioned formula you can calculate the respective outrigger load for each load case.

Formula for calculating the outrigger load

$$\text{Outrigger load} = \frac{(P A - P B) \times \text{load}}{\text{rated load}} + P B = \dots \text{ t}$$

Explanation :

Rated Load = maximum permissible load at appropriate radius and appropriate configuration ; acc. to reference lifting capacity chart (line A)

Load = load which has to be lifted ; at same radius as rated load

P A = outrigger load for appropriate outrigger at rated load and appropriate load position (line A)

P B = outrigger load for appropriate outrigger at zero load and appropriate load position (line B)

Example for calculating the outrigger load

GMK 3055

Outrigger Load Chart

Ref.-Nr. 3 085 120

Main boom: 9,60 m

Telescoping ratio: Tel. sec. I = 0.00 Tel. sec. II = 0.00 Tel. sec. III = 0.00 Tel. sec. IV = 0.00 Tel. sec. V = 0.00

Counterweight: 11,6 t

Outrigger base: 6,825 x 6,200 m

Slewing range: 360°

<<----- L O A D P O S I T I O N S ----->>

Rad.	Load	over front				45° over front				90° over side				45° over rear				over rear				
		(m)	(t)	FL	FR	RL	RR	FL	FR	RL	RR	FL	FR	RL	RR	FL	FR	RL	RR	FL	FR	RL
A B	5.0	31.5	24.3	24.3	10.0	10.0	16.1	27.0	3.4	22.1	7.1	22.5	6.2	32.7	2.6	13.5	16.8	35.6	5.3	5.3	29.0	29.0
		0.0	6.5	6.5	12.0	12.0	8.3	6.0	13.4	9.4	10.2	6.9	12.8	7.2	11.1	8.8	10.5	6.6	10.6	10.6	8.0	8.0

Outrigger loads are shown in t.

For above mentioned configuration the following example is calculated :

Load case

Boom position : 45° over front
 Outrigger : front right (FR)

Load : 25,2 t
 Radius : 5.0 m

Values from chart

Rated load : 31.5 t
 P A : 27.0 t
 P B : 6.0 t

$$\text{Outrigger load} = \frac{(27.0 - 6.0) \times 25,2}{31.5} + 6.0 = 22,8 \text{ t}$$

