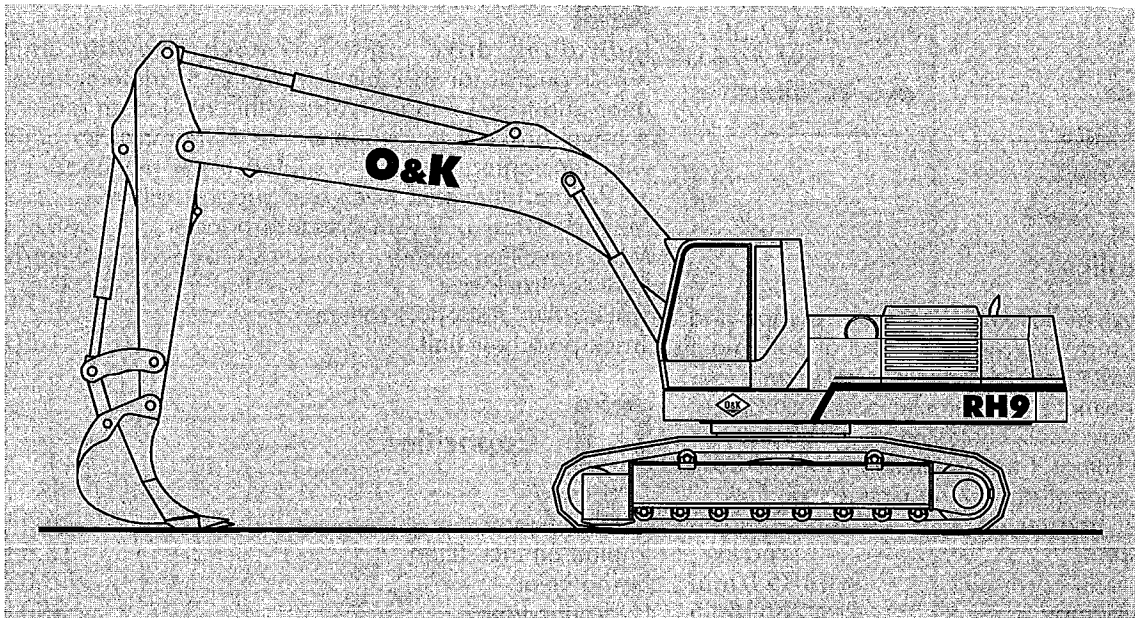


# Technical data

## Hydraulic crawler excavator

### RH 9

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Operating weight	33.5- 37 t
Engine output	172 kW
Buckets	0.95- 1.80m <sup>3</sup> (SAE)

- PMS 3-circuit hydraulics
- Dual-stage engine speed reduction
- Selection of operating modes
- Pressure booster
- Power boost operation



**O&K**  
**Orenstein & Koppel**



## Engine

O&K diesel engine (make: Deutz) BF6 M 1013 CP  
 Water-cooled • exhaust turbo charger • after-cooled  
 • integrated cooling system for hydraulic oil, lube oil  
 and coolant • electric engine speed adjustment  
 • electric engine stop via key switch.

Engine output **ISO 9249** 172 kW / 2000 rpm  
 Effect. perform. **ISO 3046/1-IFN** 160 kW/ 2000 rpm  
 Cylinder/displacement 6/1190 cm<sup>3</sup>  
 Bore/stroke 108 mm / 130 mm  
 Air filter Donaldson FHG 14  
 Machine voltage 24 V  
 2 batteries each 12 V / 110 Ah  
 Alternator 28 V / 35 A  
 Starter motor 4 kW / 24 V

**Exhaust emissions acc. EC directives**



## Hydraulics

**PMS-3-circuit hydraulics** with two main pumps and  
 separate swing pump • individual control of both main  
 pumps • double flow • parallel bucket control permits four  
 independent working movements simultaneously • hydraulic  
 oil cooler with thermostatically controlled fan • high pressure  
 lines with flanged fittings • fine mesh filters for hydraulic  
 return oil, servo-control and swing circuit • oil flow  
 optimizer • power booster.

Total hydraulic output 160 kW  
 Total oil flow 685 l/min  
 Oil flow working pumps 2 x 285 l/min  
 Oil flow swing pump 115 l/min  
 Pressure booster deactivated 320 bar  
 Pressure booster activated 360 bar



## Regulation and control system

Engine and pump control via electronic load limit governing  
 (PMS III) • controlled warm-up phase • 3 preselectable  
 output levels (ECO - Heavy - Lift) • automatic performance  
 increase in dirve mode • monitoring system for engine and  
 hydraulic system temperature with output control to  
 protect engine and pumps • automatic engine-speed  
 adjustment.



## DWD-swing gear

Swing pump and swing motor in closed circuit for swing-  
 off or decelerating of uppercarriage without losses  
 • Swing gear with integrated low wear multi-disc  
 holding brake • encased lifetime lubricated ballbearing.  
 Swing torque 103 kNm  
 Swing speed 0 - 7.3 rpm  
 Pressure 390 bar



## Operator's cabin

All around safety glazing • sky light • 3-stage fan • anti-  
 freeze vents for foot space and front window • central-  
 display for all control and monitoring functions • deluxe  
 operator's seat • control levers according to SAE  
 recommendations • individually adjustable side panels  
 • installation of radio/cassette player prepared  
 • ergonomically designed servo-control levers.

Width 960 mm



## Drive unit

Individual drive unit for each crawler unit  
 • rock guards for variable flow hydraulic motors, travel  
 gear and travel retarder valve within the length girders  
 • travel brake • track guard • low wear crawler units  
 with tensioning devices • sealed track pin bearings  
 • Lifetime lubricated track and support rollers.

Max. drawbar pull with pressure booster 380 kN  
 Max. travelling speed 5 km/h  
 Crawler track size D 6C  
 Track roller / support rollers 8 / 2  
 Track pads per unit 50



## Capacities

Fuel tank 550 l  
 Cooling system 18.5 l  
 Engine oil incl. filter 17.5 l  
 Swing gear 5.0 l  
 Hydraulic-tank 350 l  
 Hydraulic system 520 l



## Noise emission level

according to EC design inspection  
 Noise level L<sub>WA</sub> 106dB(A)  
 Sound pressure level L<sub>pA</sub> (operator's seat) 73 dB(A)

## Equipment

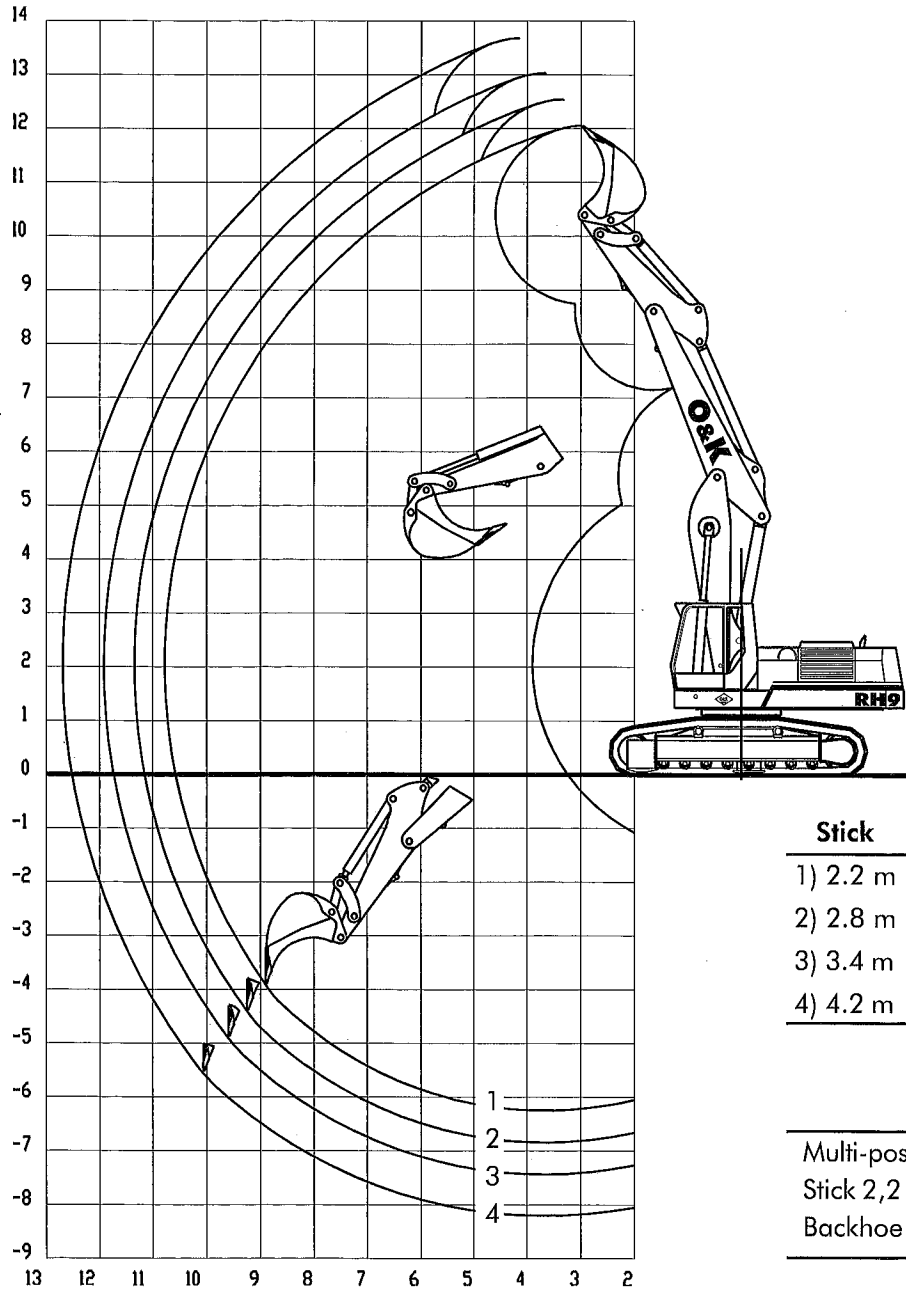
Reduced maintenance due to hardened and corrosion-  
 protected bearing pins, low-wear bearing bushings,  
 sealed bearings and easily accessible lubricating grease  
 distribution for base boom • hydraulic cylinders at both  
 sides with joint bearings • hydraulic piston cushioning  
 • working flood light at boom.

## Options

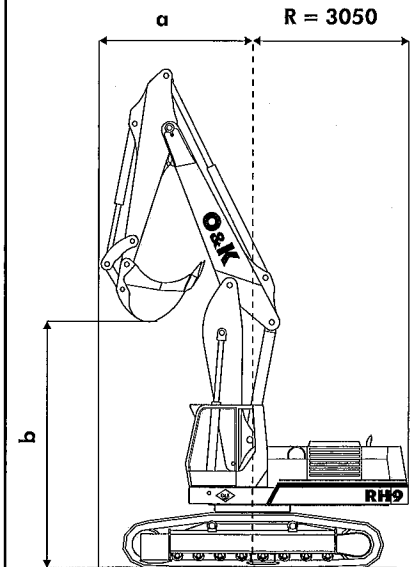
Operator's cab with retractable windscreen • air  
 conditioning • biodegradable hydraulic oil • auxiliary  
 heating • fuelling device • overload warning device  
 and pipe burst protection valves • additional working  
 lights • track guide in center of undercarriage.

**CE-mark** according to EC-machine regulations.  
**TUV-certificate** concerning compliance with **DIN ISO EN 9001**.  
**Load handling permitted with installed overload warning device and pipe burst protection valve only.**

**Working range with backhoe**  
**Multi-position boom**  
 Upper part 3.3 m



**Swing circle**



Sticks	a	b
2.2 m	3185	5545
2.8 m	2985	4780
3.4 m	2995	4175
4.2 m	3190	3414

**DIN 24086**

Stick	Digging force	Breakout force
1) 2.2 m	202 kN	214 kN
2) 2.8 m	174 kN	214 kN
3) 3.4 m	153 kN	214 kN
4) 4.2 m	132kN	214 kN

**Operating weights**

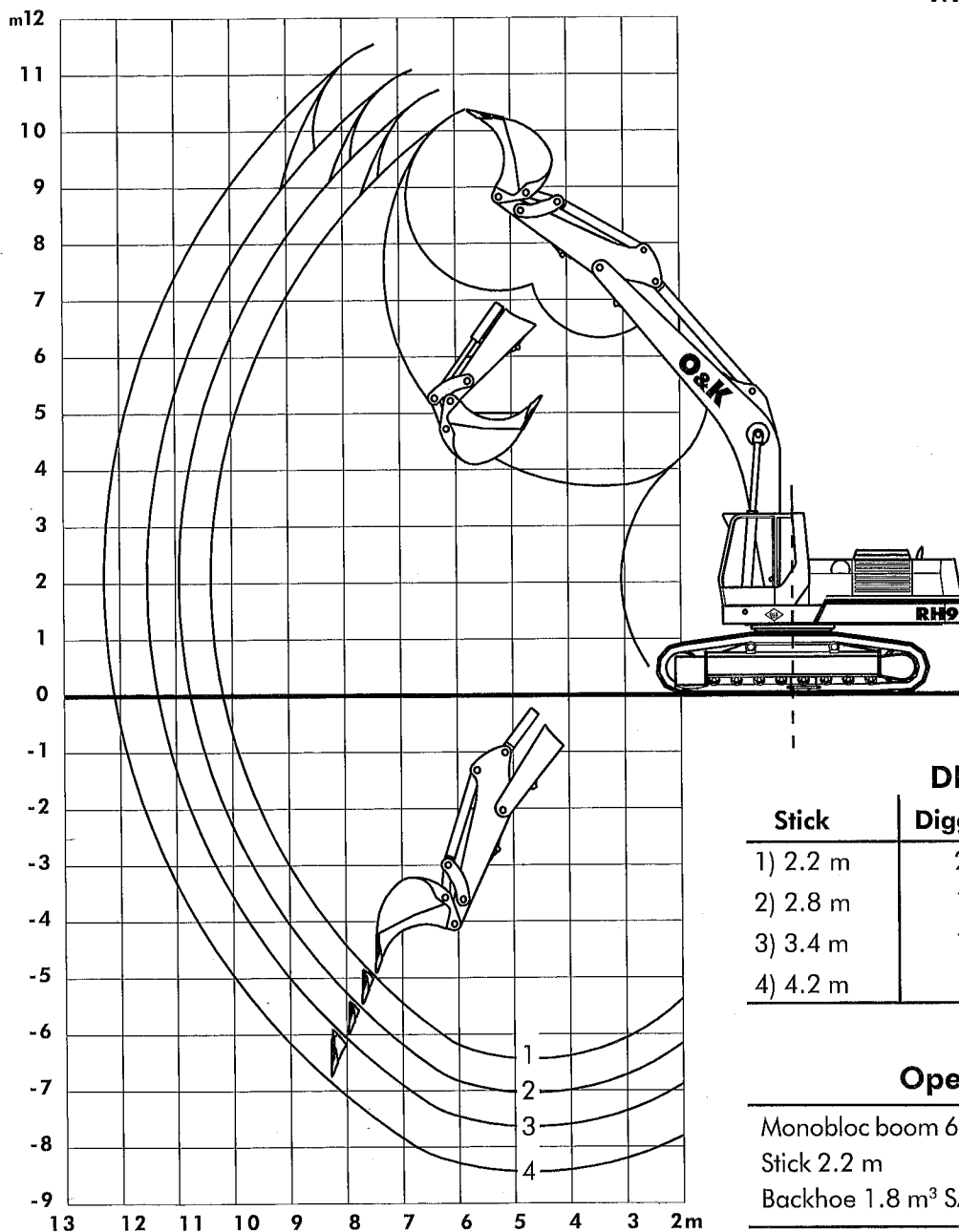
Multi-pos. boom 3,3 m	<b>RH 9 LC 600</b>	35.4 t
Stick 2,2 m		
Backhoe 1.8 m <sup>3</sup> SAE		

**Stability**  
**ISO 10567**

			Bucket		Rock bucket		
<b>Capacity</b>	SAE	m <sup>3</sup>	1.60	1.80	0.95	1.35	1.60
	CECE	m <sup>3</sup>	1.40	1.60	0.85	1.20	1.40
	struck	m <sup>3</sup>	1.20	1.40	0.75	1.05	1.20
	Bucket width	mm	1400	1400	900	1200	1400
	Teeth	number	5	5	4	5	5
	Weight	kg	1110	1160	870	1050	1140
<b>RH 9 LC 600</b>	Stick	to...m	2.2	2.2	4.2	2.8	2.2

Bucket fill 100% • max. radius • loose weight = 1.8 t/m<sup>3</sup> • total swing range 360°.

**Working range with backhoe  
Monobloc boom 6.3 m**



**DIN 24086**

Stick	Digging force	Breakout force
1) 2.2 m	202 kN	214 kN
2) 2.8 m	174 kN	214 kN
3) 3.4 m	153 kN	214 kN
4) 4.2 m	132kN	214 kN

**Operating weights**

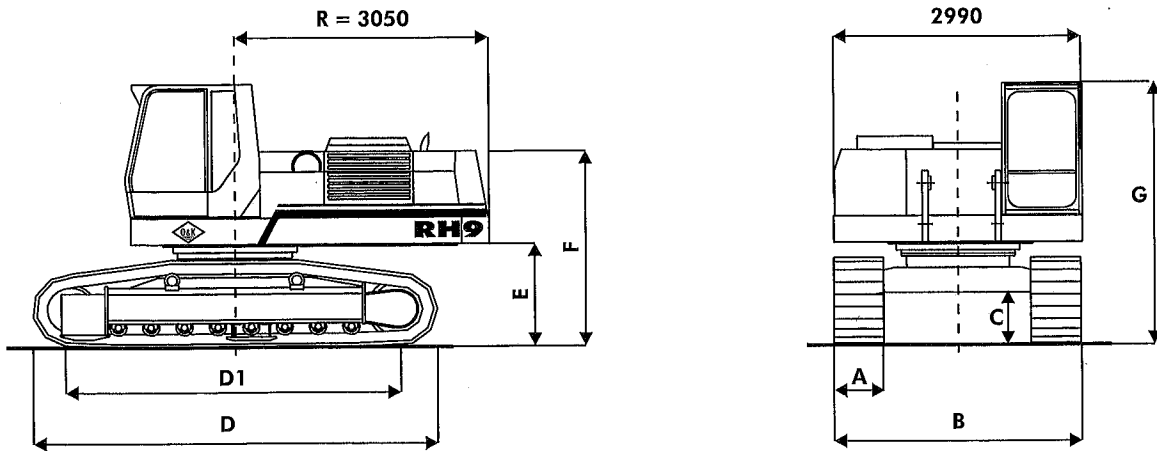
Monobloc boom 6.3 m	<b>RH 9 LC600</b>	33.5 t
Stick 2.2 m		
Backhoe 1.8 m <sup>3</sup> SAE		

**Stability  
ISO 10567**

			Bucket		Rock bucket		
<b>Capacity</b>	SAE	m <sup>3</sup>	1.60	1.80	0.95	1.35	1.60
	CECE	m <sup>3</sup>	1.40	1.60	0.85	1.20	1.40
	struck	m <sup>3</sup>	1.20	1.40	0.75	1.05	1.20
	Bucket width	mm	1400	1400	900	1200	1400
	Teeth	number	5	5	4	5	5
	Weight	kg	1110	1160	870	1050	1140
<b>RH 9 LC 600</b>	Stick	to...m	2.8	2.2 <sup>1)</sup>	4.2	3.4	2.8

Bucket fill 100% • max. radius • loose weight = 1.8 t/m<sup>3</sup> or 1.6 t/m<sup>3</sup> if <sup>1)</sup> • total swing range 360°.

## Dimensions

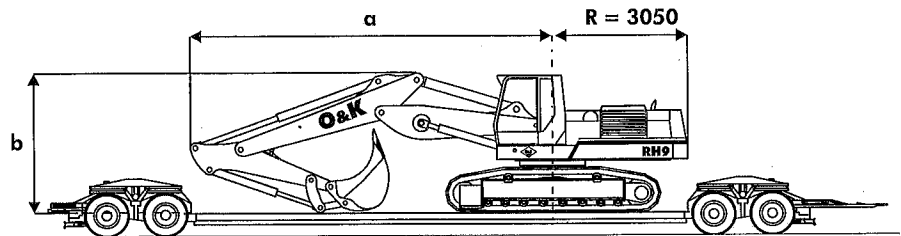


	A	B	C	D	D1	E	F	G
RH 9 LC 600	600	3000	490	4865	3990	1200	2220	3180
RH 9 LC 700	700	3100	490	4865	3990	1200	2220	3180
RH 9 LC 850	850	3250	490	4865	3990	1200	2220	3180

## Transport dimensions

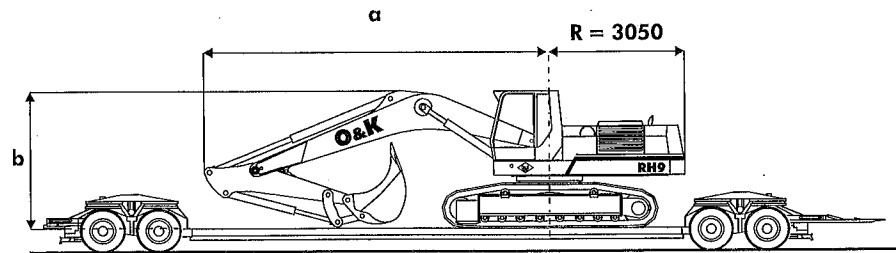
### Multi-position boom

Sticks	a	b
2.2 m	8190	3230
2.8 m	8220	3330
3.4 m	8225	3445
4.2 m	8210	3650





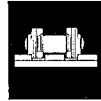

### Monobloc boom

Sticks	a	b
2.2 m	7785	3185
2.8 m	7820	3305
3.4 m	7825	3345
4.2 m	7825	3610



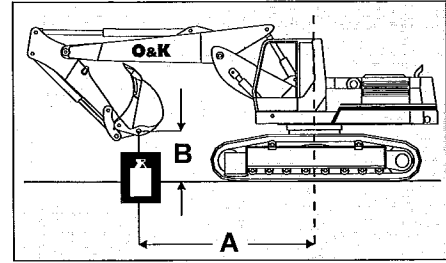
Dimensions in mm

## Weights

	 Basic machine	 with equipment	 Track size	 Ground pressure
RH 9 LC 600	27.9 t	to 35.9 t	D 6 C	0.62 kg/cm <sup>2</sup>
RH 9 LC 700	28.3 t	to 36.3 t	D 6 C	0.54 kg/cm <sup>2</sup>
RH 9 LC 850	28.9 t	to 36.9 t	D 6 C	0.46 kg/cm <sup>2</sup>

**Lifting capacities (t) RH 9 LC 600 acc. ISO 10567**  
**Monobloc boom 6.3 m • stick • bucket 0.85 m<sup>3</sup> (870 kg)**  
**Multi-position boom • stick • bucket 0.85 m<sup>3</sup> (870 kg)**

According to ISO 10567 the values stated represent 75% of the static tip load or 87% of the hydraulic lift performance. The values apply when the adjusting cylinder is in optimum position, with bucket attached. The power booster is actuated. The lifting capacity of the safety load hook is 10 t or 18 t on the toggle.



schematic representation

- a Total swing range 360° on firm even ground.
- b Longitudinally +/- 15°. The operator can work with these values at his own risk and is not secured by the overload warning device.
- \* Limited by the hydraulic components.

The lifting capacity of the machine is limited by the stability, the lifting capacity of the hydraulics and the maximum permissible load of the used hook. Overload warning device and pipe burst safety valve are required. If the bucket is substituted by other tools, then the different weights of the alternative attachments must be taken into consideration.

		RH 9 LC 600 • monobloc boom 6.3 m					RH 9 LC 600 • multi-position boom														
Sticks	B	A		4.5 m		6.0 m		7.5 m		9.0 m		max.									
		a	b	a	b	a	b	a	b	a	b	a	b								
2.2 m	m 4.5	9.9*	9.9*	7.0	7.5*	4.8	6.4*			10.9	12.9*	7.2	9.3*	7.3*							
	3.0	9.6	12.8*	6.4	8.8*	4.5	7.0*			10.6	13.7*	7.1*	9.7*	4.9	7.4*	3.0	5.9				
	1.5	8.9	14.4*	6.0	9.8*	4.3	7.6*			3.2	5.7*	10.6	13.7*	6.8	9.7*	4.6	7.4*	2.8	5.7	2.6	5.3
	0	8.7	14.5*	5.7	10.3*	4.1	7.8			9.7	13.8*	6.1	9.7*	4.3	7.4*	2.7	5.2*				
	1.5	8.7	13.8*	5.6	10.2*	4.1	7.7			9.1	14.4*	5.5	9.9*	4.0	7.0*						
	3.0	8.9	12.4*	5.7	9.3*					8.5	13.3*	5.3	8.6*	3.7	4.4*						
2.8 m	m 4.5	8.5*	8.5*	6.7*	6.7*	4.8	5.8*	3.4	4.7*			11.0	12.0*	7.2	8.8*	5.0	6.9*	3.2	5.7*		
	3.0	9.9	11.4*	6.5	8.1*	4.5	6.5*	3.3	5.7*			10.4	13.4*	7.0	9.3*	4.8	7.2*	3.1	5.8		
	1.5	8.9	13.6*	6.0	9.2*	4.2	7.1*	3.1	5.9	2.8	4.1*	10.4	13.4*	7.1	9.5*	4.4	7.2*	2.9	5.7	2.3	3.9*
	0	8.9	14.3*	5.7	10.0*	4.0	7.6*	3.0	5.8			9.9	13.5*	6.4	9.5*	4.0	7.2*	2.7	5.5		
	1.5	8.5	14.0*	5.5	10.1*	3.9	7.4*			9.1	13.8*	5.6	9.8*	3.7	7.2*	2.6	4.6*				
	3.0	8.6	13.0*	5.5	9.5*	4.0	7.1*			8.5	13.2*	5.3	9.3*	3.5	6.0*						
3.4 m	m 4.5			6.0*	6.0*	4.9	5.3*	3.5	4.9*			11.2	11.2*	7.2*	8.3*	5.2	6.7*	3.4	5.6*		
	3.0	10.2*	10.2*	6.7	7.4*	4.6	6.0*	3.3	5.3*			10.5*	12.9*	7.0*	9.1*	5.1	7.0*	3.3	5.7*		
	1.5	9.2	12.8*	6.1	8.7*	4.3	6.8*	3.1	5.7*	2.5	3.1*	10.3*	13.5*	7.0	9.5*	4.7	7.2*	3.1	5.6	2.0	2.9*
	0	8.6	14.1*	5.7	9.7*	4.0	7.4*	3.0	5.8			10.3	13.4*	6.6	9.4*	4.2	7.1*	2.8	5.6		
	1.5	8.4	14.2*	5.5	10.0*	3.9	7.6	2.9	5.7			9.3	13.6*	5.9	9.5*	3.8	7.3*	2.6	5.3		
	3.0	8.5	13.5*	5.4	9.8*	3.9	7.4*			8.8	14.2*	5.3	9.7*	3.5	6.7*	2.5	3.9				
4.2 m	m 4.5					4.5*	4.5*	3.5	4.3*			6.8*	6.8*	6.9*	6.9*	5.1*	6.2*	3.5	5.2*		
	3.0	8.4*	8.4*	6.4*	6.4*	4.7	5.3*	3.3	4.7*			10.5	11.8*	7.0	8.4*	4.9	6.6*	3.4	5.4*		
	1.5	9.5	11.3*	6.2	7.8*	4.3	6.1*	3.1	5.2*	2.1*	2.1*	10.1	13.1*	6.7	9.0*	4.9	6.9*	3.2	5.4*	1.7	2.0*
	0	8.6	13.2*	5.6	9.0*	4.0	6.9*	2.9	5.6*			10.0*	13.1*	6.7*	9.2*	4.4	6.9*	2.9	5.4*		
	1.5	8.2	13.9*	5.3	9.7*	3.8	7.3*	2.8	5.6			9.5	13.1*	6.1	9.1*	4.0	6.9*	2.6	5.4*		
	3.0	8.1	13.7*	5.2	9.7*	3.7	7.3*	2.7	5.5			8.8	13.5*	5.4	9.5*	3.6	7.0*	2.4	4.8*		

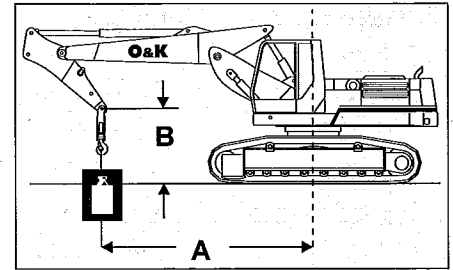
## Lifting capacities (t) RH 8 acc. ISO 10567

**Monobloc boom 6.3 m • stick • load hook**

**Multi-position boom • stick • load hook**

According to ISO 10567 the values stated represent 75% of the static tip load or 87% of the hydraulic lift performance. The values apply when the adjusting cylinder is in optimum position, with hook attached. The power booster is actuated. The lifting capacity of the safety load hook is 20 t.

- a Total swing range 360° on firm even ground.
- b Longitudinally +/- 15°. The operator can work with these values at his own risk and is not secured by the overload warning device.
- \* Limited by the hydraulic components.

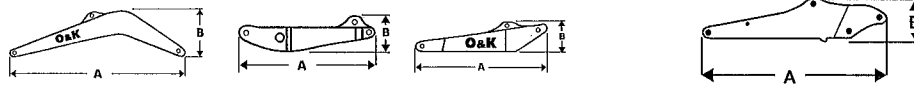


schematiic representation

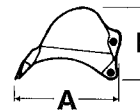
The lifting capacity of the machine is limited by the stability, the lifting capacity of the hydraulics and the maximum permissible load of the used hook. Overload warning device and pipe burst safety valve are required. If the hook is substituted by other tools, then the different weights of the alternative attachments must be taken into consideration.

		RH 9 LC 600 • monobloc boom 6.3 m					RH 9 LC 600 • multi-position boom														
Sticks	B A	4.5 m		6.0 m		7.5 m		9.0 m		max.		4.5 m		6.0 m		7.5 m		9.0 m		max.	
		a	b	a	b	a	b	a	b	a	b	a	b	a	b	a	b	a	b	a	b
2.2 m	m 4.5	11.6	12.2*	7.7	9.3*	5.6	8.0*					12.0	14.8*	8.2	10.8*	5.6	8.7*				
	↑ 3.0			7.3	10.5*	5.4	8.6*					11.8	15.0*	8.1	11.2*	5.4	8.8*	3.8	6.6		
	↑ 1.5			6.9	11.5*	5.2	8.9			4.2	7.1	11.5	15.4*	7.5	11.2*	5.1	8.7*	3.7	6.5	3.6	6.4
	● 0	10.0	13.6*	6.7	11.8*	5.1	8.7					10.6	15.6*	6.9	11.3*	4.8	8.6*				
	↓ 1.5	10.0	15.0*	6.7	11.5*	5.1	8.7					10.1	16.0*	6.5	11.4*	4.7	8.0*				
	↓ 3.0	10.3	13.3*	6.8	10.3*							9.7	14.2*	6.4	9.4*	4.2*	4.2*				
2.8 m	m 4.5	10.7*	10.7*	7.8	8.5*	5.6	7.4*					12.0	13.9*	8.2	10.3*	5.8	8.4*	3.9	6.8		
	↑ 3.0	10.8	13.8*	7.3	9.8*	5.4	8.1*	4.1	6.9			11.7	15.0*	8.1	10.0*	5.6	8.6*	3.9	6.8		
	↑ 1.5	10.0	13.5*	6.9	11.0*	5.1	8.7*	4.0	6.8	3.8	5.7*	11.6	15.1*	7.8	11.0*	5.2	8.6	3.7	6.6	3.2	5.5*
	● 0	9.8	16.0*	6.6	11.6*	5.0	8.6	3.9	6.7			10.7	15.2*	7.2	11.0*	4.9	8.7	3.6	6.4		
	↓ 1.5	9.7	15.4*	6.6	11.5*	4.9	8.6					10.1	15.6*	6.5	11.3*	4.6	8.4	3.5	5.1*		
	↓ 3.0	9.9	14.1*	6.6	10.7*	5.0	8.1*					9.6	15.2*	6.2	10.3*	4.5	6.7*				
3.4 m	m 4.5			7.8*	7.8*	5.7	6.9*	4.3	6.5*			12.1	13.1*	8.2	9.9*	6.0	8.0*	4.2	6.9		
	↑ 3.0	11.2	12.5*	7.5	9.2*	5.5	7.7*	4.2	6.8*			11.7	14.8*	8.0	10.7*	5.8	8.5*	4.1	6.8		
	↑ 1.5	10.2	14.9*	7.0	10.5*	5.2	8.4*	4.0	6.8	3.5	4.6*	11.6	15.1*	8.0	11.0*	5.5	8.6*	3.9	6.7	3.0	4.4*
	● 0	9.8	15.9*	6.7	11.4*	5.0	8.7	3.9	6.7			11.1	15.1*	7.4	10.9*	5.1	8.5*	3.7	6.5		
	↓ 1.5	9.7	15.8*	6.5	11.6*	4.9	8.5	3.9	6.6			10.2	15.3*	6.8	11.1*	4.7	8.5*	3.5	6.4		
	↓ 3.0	9.8	14.8*	6.5	11.1*	4.9	8.5					9.8	15.7*	6.3	11.0*	4.5	7.8*				
4.2 m	m 4.5					5.8	6.1*	4.3	5.8*			9.0*	9.0*	8.2	8.7*	6.0	7.7*	4.4	6.6*		
	↑ 3.0	10.6*	10.6*	7.6	8.1*	5.5	6.9*	4.2	6.2*			11.6	13.7*	8.0	10.1*	5.9	8.1*	4.2	6.8		
	↑ 1.5	10.4	13.4*	7.1	9.6*	5.2	7.8*	4.0	6.7*	3.1	3.5*	11.3	14.8*	7.8	10.6*	5.7	8.3	4.0	6.7	2.6	3.4*
	● 0	9.7	15.1*	6.6	10.7*	4.9	8.4*	3.8	6.6*			11.3	14.7*	7.6	10.7*	5.3	8.3	3.8	6.6		
	↓ 1.5	9.4	15.6*	6.4	11.3*	4.8	8.4*	3.7	6.4*			10.4	14.8*	6.9	10.7*	4.9	8.4*	3.5	6.4		
	↓ 3.0	9.4	15.2*	6.3	11.3*	4.7	8.4*	3.7	6.5*			9.8	15.3*	6.4	11.0*	4.5	8.3	3.4	5.9*		

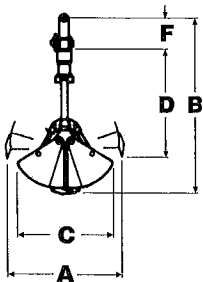
## Dimensions and weights



		Multi-position boom						
		Monobloc boom	Lower part	Upper part	Stick			
System length	m	6.30	3.50	3.30	2.20	2.80	3.40	4.20
A	m	6.60	3.80	4.60	3.40	4.00	4.60	5.40
B	m	1.70	1.00	1.00	1.00	1.00	1.00	1.00
Width	m	0.75	0.75	0.75	0.55	0.55	0.55	0.55
Weight	kg	2310	1760	1780	1160	1300	1410	1630
Toggle + linkage	kg	—	—	—	300	300	300	300
Cylinder	kg	480	660	480	260	260	260	260



		Bucket		Rock bucket		
Capacity (CECE)	m <sup>3</sup>	1.40	1.60	0.85	1.20	1.40
Width	mm	1400	1400	900	1200	1400
Teeth	number	5	5	4	5	5
Weight	kg	1110	1160	870	1050	1140
A	m	1.70	1.80	1.70	1.70	1.70
B	m	1.20	1.20	1.20	1.20	1.20



		Digging grab				
Capacity (CECE)	m <sup>3</sup>	0.26	0.40	0.50	0.62	1.20
Width	mm	500	700	900	900	1500
Bolt-on teeth	number	5	7	9	9	—
Weight	kg	740	1060	1105	1205	1325
A	m	1.71	1.71	1.71	2.00	1.83
B	m	2.80	2.80	2.80	2.90	3.05
C	m	1.45	1.45	1.45	1.45	1.55
D	m	1.70	1.80	1.70	1.85	2.06
F	m	0.59	0.59	0.59	0.59	0.59

Alterations without prior notice. The illustrations do not necessary show the standard version of the machine.



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