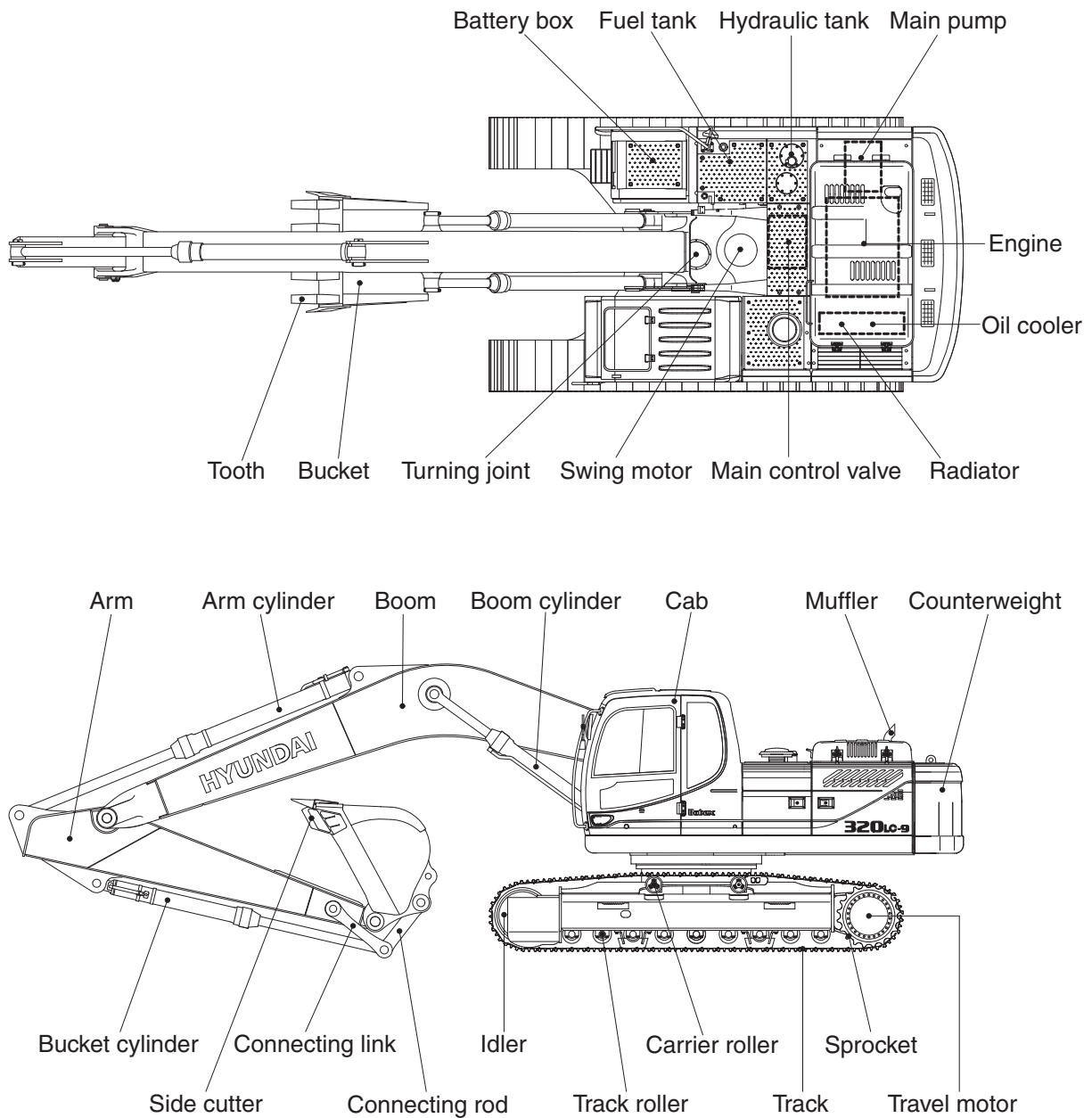


SPECIFICATIONS

1. MAJOR COMPONENT

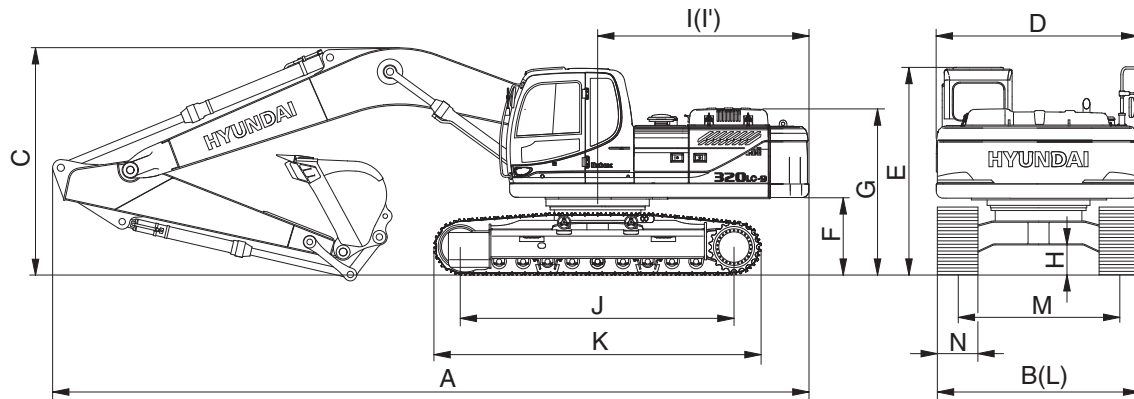


32092SP01A

2. SPECIFICATIONS

1) R320LC-9

· 6.45 m (21' 2") BOOM and 3.20 m (10' 6") ARM

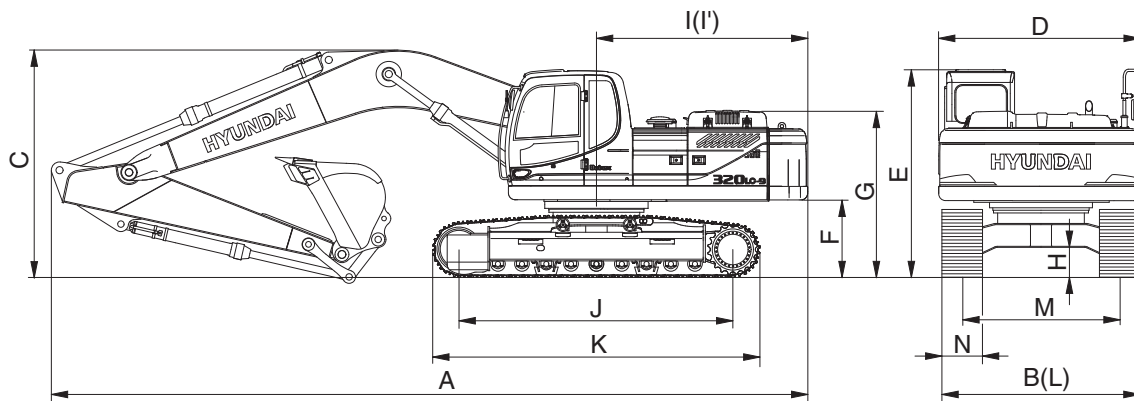


32092SP02

Description		Unit	Specification
Operating weight		kg (lb)	33000 (72750)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	1.44 (1.88)
Overall length	A	mm (ft-in)	10980 (36' 0")
Overall width, with 600 mm shoe	B		3280 (10' 9")
Overall height	C		3380 (11' 1")
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3090 (10' 2")
Ground clearance of counterweight	F		1200 (3' 11")
Engine cover height	G		2580 (8' 6")
Minimum ground clearance	H		500 (1' 8")
Rear-end distance	I		3265 (10' 9")
Rear-end swing radius	I'		3330 (10' 11")
Distance between tumblers	J		4030 (13' 3")
Undercarriage length	K		4940 (16' 2")
Undercarriage width	L		3280 (10' 9")
Track gauge	M		2680 (8' 10")
Track shoe width, standard	N		600 (24")
Travel speed (low/high)		km/hr (mph)	3.3/5.5 (2.1/3.4)
Swing speed		rpm	9.2
Gradeability		Degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.63 (8.96)
Max traction force		kg (lb)	29500 (65040)

2) R320NLC-9

· 6.45 m (21' 2") BOOM and 3.20 m (10' 6") ARM

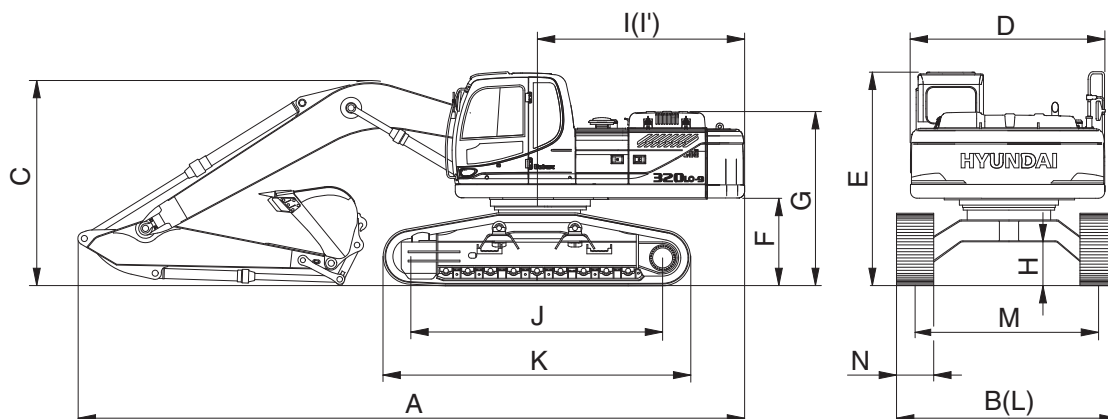


32092SP03

Description		Unit	Specification
Operating weight		kg (lb)	32000 (70500)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	1.44 (1.88)
Overall length	A	mm (ft-in)	10980 (36' 0")
Overall width, with 600 mm shoe	B		2990 (9' 10")
Overall height	C		3380 (11' 1")
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3090 (10' 2")
Ground clearance of counterweight	F		1200 (3' 11")
Engine cover height	G		2580 (8' 6")
Minimum ground clearance	H		500 (1' 8")
Rear-end distance	I		3265 (10' 9")
Rear-end swing radius	I'		3330 (10' 11")
Distance between tumblers	J		4030 (13' 3")
Undercarriage length	K		4940 (16' 2")
Undercarriage width	L		2990 (9' 10")
Track gauge	M		2390 (7' 10")
Track shoe width, standard	N		600 (24")
Travel speed (low/high)		km/hr (mph)	3.3/5.5 (2.1/3.4)
Swing speed		rpm	9.2
Gradeability		Degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.61 (8.67)
Max traction force		kg (lb)	29500 (65040)

3) R320LC-9 HIGH WALKER

· 6.45 m (21' 2") BOOM and 3.20 m (10' 6") ARM

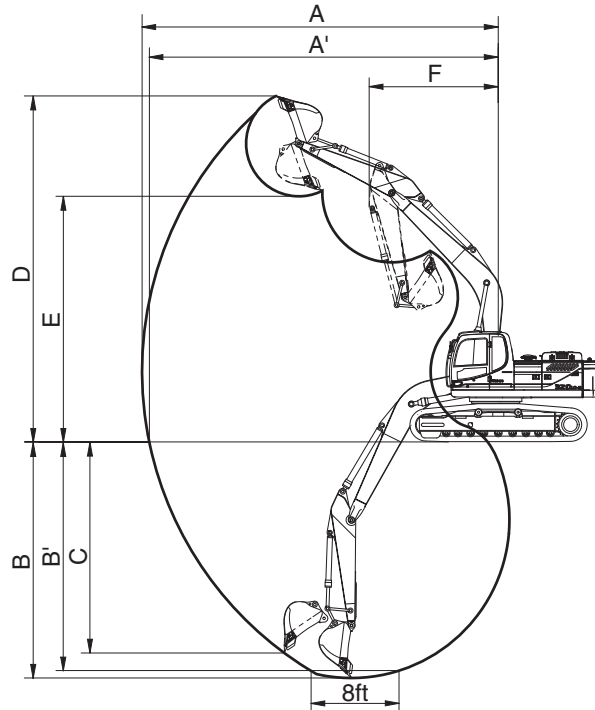


32092SP04

Description		Unit	Specification
Operating weight		kg (lb)	34700 (76500)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	1.44 (1.88)
Overall length	A	mm (ft-in)	10910 (35' 10")
Overall width, with 600 mm shoe	B		3470 (11' 5")
Overall height	C		3360 (11' 0")
Superstructure width	D		2980 (9' 9")
Overall height of cab	E		3390 (11' 1")
Ground clearance of counterweight	F		1500 (4' 11")
Engine cover height	G		2880 (9' 5")
Minimum ground clearance	H		765 (2' 6")
Rear-end distance	I		3265 (10' 9")
Rear-end swing radius	I'		3330 (10' 11")
Distance between tumblers	J		4030 (13' 3")
Undercarriage length	K		4940 (16' 2")
Undercarriage width	L		3470 (11' 5")
Track gauge	M		2870 (9' 5")
Track shoe width, standard	N		600 (24")
Travel speed (low/high)		km/hr (mph)	3.3/5.5 (2.1/3.4)
Swing speed		rpm	9.2
Gradeability		Degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.67 (9.53)
Max traction force		kg (lb)	29500 (65040)

3. WORKING RANGE

1) R320LC-9, R320NLC-9

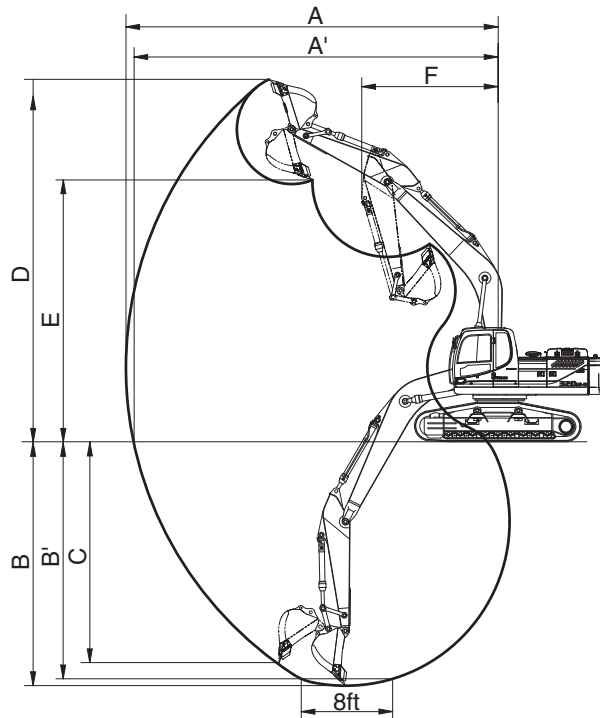


32092SP05

Description		6.45 m (21' 2") Boom				6.15 m (20' 2") Boom
		2.2 m (7' 3") Arm	2.5 m (8' 2") Arm	3.2 m (10' 6") Arm	4.05 m (13' 3") Arm	2.2 m (7' 3") Arm
Max digging reach	A	10330 mm (33' 11")	10550 mm (34' 7")	11140 mm (36' 7")	11950 mm (39' 2")	10020 mm (32' 10")
Max digging reach on ground	A'	10110 mm (33' 2")	10330 mm (33' 11")	10940 mm (35' 11")	11760 mm (38' 7")	9800 mm (32' 2")
Max digging depth	B	6370 mm (20' 11")	6670 mm (21' 11")	7370 mm (24' 2")	8220 mm (26' 12")	6160 mm (20' 3")
Max digging depth (8ft level)	B'	6160 mm (20' 3")	6470 mm (21' 3")	7210 mm (23' 8")	8080 mm (26' 6")	5950 mm (19' 6")
Max vertical wall digging depth	C	5980 mm (19' 7")	5920 mm (19' 5")	6360 mm (20' 10")	7260 mm (23' 10")	5710 mm (18' 9")
Max digging height	D	10220 mm (33' 6")	10170 mm (33' 4")	10310 mm (33' 10")	10710 mm (35' 2")	9940 mm (32' 7")
Max dumping height	E	7050 mm (23' 2")	7050 mm (23' 2")	7240 mm (23' 9")	7630 mm (25' 0")	6780 mm (22' 3")
Min swing radius	F	4700 mm (15' 5")	4500 mm (14' 9")	4470 mm (14' 8")	4470 mm (14' 8")	4520 mm (14' 10")
Bucket digging force	SAE	189.3 [205.5] kN	189.3 [205.5] kN	189.3 [205.5] kN	189.3 [205.5] kN	189.3 [205.5] kN
		19300 [20950] kgf	19300 [20950] kgf	19300 [20950] kgf	19300 [20950] kgf	19300 [20950] kgf
		42550 [46200] lbf	42550 [46200] lbf	42550 [46200] lbf	42550 [46200] lbf	42550 [46200] lbf
	ISO	211.8 [230.0] kN	211.8 [230.0] kN	211.8 [230.0] kN	211.8 [230.0] kN	211.8 [230.0] kN
		21600 [23450] kgf	21600 [23450] kgf	21600 [23450] kgf	21600 [23450] kgf	21600 [23450] kgf
		47620 [51700] lbf	47620 [51700] lbf	47620 [51700] lbf	47620 [51700] lbf	47620 [51700] lbf
Arm crowd force	SAE	196.6 [213.4] kN	178.9 [194.2] kN	143.2 [155.5] kN	119.6 [129.9] kN	196.6 [213.4] kN
		20000 [21760] kgf	18200 [19810] kgf	14600 [15850] kgf	12200 [13240] kgf	20000 [21760] kgf
		44190 [47980] lbf	40220 [43670] lbf	32190 [34950] lbf	26890 [29190] lbf	44190 [47980] lbf
	ISO	202.8 [220.2] kN	185.1 [201.0] kN	147.1 [159.7] kN	122.7 [133.3] kN	202.8 [220.2] kN
		20700 [22450] kgf	18900 [20500] kgf	15000 [16290] kgf	12515 [13590] kgf	20700 [22450] kgf
		45600 [49510] lbf	41620 [45190] lbf	33070 [35900] lbf	27590 [29950] lbf	45600 [49510] lbf

[] : Power boost

2) R320LC-9 HIGH WALKER



32092SP06

Description		6.45 m (21' 2") Boom				6.15 m (20' 2") Boom
		2.2 m (7' 3") Arm	2.5 m (8' 2") Arm	3.2 m (10' 6") Arm	4.05 m (13' 3") Arm	2.2 m (7' 3") Arm
Max digging reach	A	10330 mm (33'11")	10550 mm (34' 7")	11140 mm (36' 7")	11950 mm (39' 2")	10020 mm (32'10")
Max digging reach on ground	A'	10040 mm (32'11")	10270 mm (33' 8")	10880 mm (35' 8")	11710 mm (38' 5")	9730 mm (31'11")
Max digging depth	B	6100 mm (20' 0")	6400 mm (20'12")	7100 mm (23' 4")	7950 mm (26' 1")	5880 mm (19' 3")
Max digging depth (8ft level)	B'	5890 mm (19' 4")	6200 mm (20' 4")	6940 mm (22' 9")	7800 mm (25' 7")	5680 mm (18' 8")
Max vertical wall digging depth	C	5700 mm (18' 8")	5650 mm (18' 6")	6080 mm (19'11")	6980 mm (22'11")	5440 mm (17'10")
Max digging height	D	10500 mm (34' 5")	10450 mm (34' 3")	10590 mm (34' 9")	10990 mm (36' 1")	10220 mm (33' 6")
Max dumping height	E	7330 mm (24' 1")	7330 mm (24' 1")	7520 mm (24' 8")	7910 mm (25'11")	7060 mm (23' 2")
Min swing radius	F	4700 mm (15' 5")	4500 mm (14' 9")	4470 mm (14' 8")	4470 mm (14' 8")	4520 mm (14'10")
Bucket digging force	SAE	189.3 [205.5] kN	189.3 [205.5] kN	189.3 [205.5] kN	189.3 [205.5] kN	189.3 [205.5] kN
		19300 [20950] kgf	19300 [20950] kgf	19300 [20950] kgf	19300 [20950] kgf	19300 [20950] kgf
		42550 [46200] lbf	42550 [46200] lbf	42550 [46200] lbf	42550 [46200] lbf	42550 [46200] lbf
	ISO	211.8 [230.0] kN	211.8 [230.0] kN	211.8 [230.0] kN	211.8 [230.0] kN	211.8 [230.0] kN
		21600 [23450] kgf	21600 [23450] kgf	21600 [23450] kgf	21600 [23450] kgf	21600 [23450] kgf
		47620 [51700] lbf	47620 [51700] lbf	47620 [51700] lbf	47620 [51700] lbf	47620 [51700] lbf
Arm crowd force	SAE	196.6 [213.4] kN	178.9 [194.2] kN	143.2 [155.5] kN	119.6 [129.9] kN	196.6 [213.4] kN
		20000 [21760] kgf	18200 [19810] kgf	14600 [15850] kgf	12200 [13240] kgf	20000 [21760] kgf
		44190 [47980] lbf	40220 [43670] lbf	32190 [34950] lbf	26890 [29190] lbf	44190 [47980] lbf
	ISO	202.8 [220.2] kN	185.1 [201.0] kN	147.1 [159.7] kN	122.7 [133.3] kN	202.8 [220.2] kN
		20700 [22450] kgf	18900 [20500] kgf	15000 [16290] kgf	12515 [13590] kgf	20700 [22450] kgf
		45600 [49510] lbf	41620 [45190] lbf	33070 [35900] lbf	27590 [29950] lbf	45600 [49510] lbf

[] : Power boost

4. WEIGHT

1) R320LC-9, R320NLC-9

Item	R320LC-9		R320NLC-9	
	kg	lb	kg	lb
Upperstructure assembly	14310	31550	←	←
Main frame weld assembly	3760	8290	←	←
Engine assembly	720	1590	←	←
Main pump assembly	200	440	←	←
Main control valve assembly	220	490	←	←
Swing motor assembly	370	820	←	←
Hydraulic oil tank assembly	230	490	←	←
Fuel tank assembly	210	450	←	←
Counterweight	6200	13670	←	←
Cab assembly	310	680	←	←
Radiator total assy	280	620	←	←
Lower chassis assembly	11500	25770	11360	25040
Track frame weld assembly	3970	8750	3835	8450
Swing bearing	410	900	←	←
Travel motor assembly	360	800	←	←
Turning joint	50	110	←	←
Tension cylinder	210	450	←	←
Idler	250	540	←	←
Sprocket	80	170	←	←
Carrier roller	40	80	←	←
Track roller	60	120	←	←
Track-chain assembly (600 mm standard triple grouser shoe)	1860	4100	←	←
Front attachment assembly (6.45 m boom, 3.2 m arm, 1.44 m³ SAE heaped bucket)	6390	14090	←	←
6.45 m boom assembly	2540	5600	←	←
3.2 m arm assembly	1160	2560	←	←
1.44 m³ SAE heaped bucket	1120	2470	←	←
Boom cylinder assembly	300	660	←	←
Arm cylinder assembly	380	840	←	←
Bucket cylinder assembly	270	570	←	←
Bucket control linkage assembly	370	820	←	←

2) R320LC-9 HIGH WALKER

Item	kg	lb
Upperstructure assembly	14310	31550
Main frame weld assembly	3760	8290
Engine assembly	720	1590
Main pump assembly	200	440
Main control valve assembly	220	490
Swing motor assembly	370	820
Hydraulic oil tank assembly	230	490
Fuel tank assembly	210	450
Counterweight	6200	13670
Cab assembly	310	680
Radiator total assy	280	620
Lower chassis assembly	14000	30860
Track frame weld assembly	6180	13620
Swing bearing	410	900
Travel motor assembly	360	800
Turning joint	50	110
Tension cylinder	210	450
Idler	250	540
Sprocket	80	170
Carrier roller	40	80
Track roller	60	120
Track-chain assembly (600 mm standard triple grouser shoe)	1860	4100
Front attachment assembly (6.45 m boom, 3.2 m arm, 1.44 m³ SAE heaped bucket)	6390	14090
6.45 m boom assembly	2540	5600
3.2 m arm assembly	1160	2560
1.44 m³ SAE heaped bucket	1120	2470
Boom cylinder assembly	300	660
Arm cylinder assembly	380	840
Bucket cylinder assembly	270	570
Bucket control linkage assembly	370	820

5. LIFTING CAPACITIES

1) R320LC-9

(1) 6.15 m (20' 2") boom, 2.2 m (7' 3") arm equipped with 1.44 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 6200 kg (13670 lb) counterweight.

•  : Rating over-front

•  : Rating over-side or 360 degree

Load point height		Load radius								At max. reach		
		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		Capacity		Reach
												m (ft)
7.5 m (25.0 ft)	kg lb									*7480 *16490	5680 12520	7.69 (25.2)
6.0 m (20.0 ft)	kg lb					*8380 *18470	*8380 *18470	*8070 *17790	5770 12720	7000 15430	4510 9940	8.61 (28.2)
4.5 m (15.0 ft)	kg lb			*12080 *26630	*12080 *26630	*9630 *21230	8260 18210	*8490 *18720	5630 12410	6170 13600	3920 8640	9.16 (30.1)
3.0 m (10.0 ft)	kg lb			*15590 *34370	12100 26680	*11230 *24760	7760 17110	8490 18720	5400 11900	5810 12810	3650 8050	9.39 (30.8)
1.5 m (5.0 ft)	kg lb			*18040 *39770	11310 24930	11860 26150	7330 16160	8250 18190	5180 11420	5780 12740	3610 7960	9.35 (30.7)
Ground Line	kg lb			*18760 *41360	11030 24320	11570 25510	7080 15610	8080 17810	5030 11090	6090 13430	3800 8380	9.02 (29.6)
-1.5 m (-5.0 ft)	kg lb	*16910 37280	*16910 *37280	*18280 *40300	11030 24320	11490 25330	7000 15430	8050 17750	5000 11020	6900 15210	4330 9550	8.37 (27.5)
-3.0 m (-10 ft)	kg lb	*22970 *50640	*22970 *50640	*16680 *36770	11210 24710	11600 25570	7100 15650			*8360 *18430	5530 12190	7.29 (23.9)
-4.5 m (-15.0 ft)	kg lb	*17920 *39510	*17920 *39510	*13190 *29080	11640 25660							

- Note
1. Lifting capacity are based on SAE J1097 and ISO 10567.
 2. Lifting capacity of the ROBEX series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
 3. The load point is a hook located on the back of the bucket.
 4. *indicates load limited by hydraulic capacity.

(2) 6.45 m (21' 2") boom, 2.2 m (7' 3") arm equipped with 1.44 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 6200 kg (13670 lb) counterweight.

Load point height		Load radius								At max. reach		
		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		Capacity		Reach
												m (ft)
7.5 m (25.0 ft)	kg lb									*7120 *15700	5110 11270	8.07 (26.5)
6.0 m (20.0 ft)	kg lb					*8220 *18120	*8220 *18120	*7700 *16980	5710 12590	6450 14220	4110 9060	8.95 (29.4)
4.5 m (15.0 ft)	kg lb			*12360 *27250	*12360 *27250	*9550 *21050	8070 17790	*8250 *18190	5520 12170	5730 12630	3590 7910	9.47 (31.1)
3.0 m (10.0 ft)	kg lb					*11160 *24600	7530 16600	8340 18390	5260 11600	5400 11900	3350 7390	9.70 (31.8)
1.5 m (5.0 ft)	kg lb					11600 25570	7090 15630	8080 17810	5030 11090	5370 11840	3310 7300	9.66 (31.7)
Ground Line	kg lb			*18470 *40720	10700 23590	11320 24960	6850 15100	7910 17440	4870 10740	5650 12460	3480 7670	9.34 (30.6)
-1.5 m (-5.0 ft)	kg lb	*14420 *31790	*14420 *31790	*17890 *39440	10740 23680	11250 24800	6790 14970	7870 17350	4830 10650	6350 14000	3940 8690	8.72 (28.6)
-3.0 m (-10 ft)	kg lb	*22130 *48790	*22130 *48790	*16390 *36130	10940 24120	11370 25070	6890 15190			7890 17390	4950 10910	7.70 (25.3)
-4.5 m (-15.0 ft)	kg lb	*17840 *39330	*17840 *39330	*13400 *29540	11360 25040							

(3) 6.45 m (21' 2") boom, 2.5 m (8' 2") arm equipped with 1.44 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 6200 kg (13670 lb) counterweight.

Load point height		Load radius										At max. reach		
		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		9.0 m (30.0 ft)		Capacity		Reach
														m (ft)
7.5 m (25.0 ft)	kg lb											*6720 *14820	4840 10670	8.34 (27.4)
6.0 m (20.0 ft)	kg lb							*7320 *16140	5750 12680			6170 13600	3920 8640	9.19 (30.2)
4.5 m (15.0 ft)	kg lb			*11600 *25570	*11600 *25570	*9120 *20110	8120 17900	*7930 *17840	5540 12210			5500 12130	3430 7560	9.70 (31.8)
3.0 m (10.0 ft)	kg lb			*15130 *33360	11750 25900	*10770 *23740	7550 16640	8350 18410	5260 11600			5180 11420	3190 7030	9.92 (32.5)
1.5 m (5.0 ft)	kg lb			*17590 *38780	10890 24010	11590 25550	7080 15610	8060 17770	5000 11020	5970 13160	3680 8110	5140 11330	3150 6940	9.88 (32.4)
Ground Line	kg lb			*18360 *40480	10600 23370	11270 24850	6790 14970	7860 17330	4820 10630			5390 11880	3290 7250	9.57 (31.4)
-1.5 m (-5.0 ft)	kg lb	*15010 *33090	*15010 *33090	*18010 *39710	10600 23370	11160 24600	6700 14770	7790 17170	4760 10490			6010 13250	3700 8160	8.97 (29.4)
-3.0 m (-10.0 ft)	kg lb	*22800 *50270	*22800 *50270	*16720 *36860	10770 23740	11240 24780	6780 14950					7360 16230	4580 10100	7.98 (26.2)
-4.5 m (-15.0 ft)	kg lb	*19110 *42130	*19110 *42130	*14080 *31040	11150 24580	*10340 *22800	7070 15590					*7300 *16090	6790 14970	6.42 (21.1)

(4) 6.45 m (21' 2") boom, 3.2 m (10' 6") arm equipped with 1.44 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 6200 kg (13670 lb) counterweight.

Load point height		Load radius												At max. reach		
		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		9.0 m (30.0 ft)		Capacity		Reach
																m (ft)
7.5 m (25.0 ft)	kg									*5240	*5240			*5970	4180	9.06
	lb									*11550	*11550			*13160	9220	(29.7)
6.0 m (20.0 ft)	kg									*6500	5860			5490	3450	9.84
	lb									*14330	12920			12100	7610	(32.3)
4.5 m (15.0 ft)	kg							*8090	*8090	*7190	5610	*5440	3960	4930	3040	10.31
	lb							*17840	*17840	*15850	12370	*11990	8730	10870	6700	(33.8)
3.0 m (10.0 ft)	kg					*13400	12150	*9820	7670	*8110	5290	6120	3810	4660	2830	10.52
	lb					*29540	26790	*21650	16910	*17880	11660	13490	8400	10270	6240	(34.5)
1.5 m (5.0 ft)	kg					*16400	11070	*11460	7120	8060	4990	5940	3640	4610	2780	10.48
	lb					*36160	24410	*25260	15700	17770	11000	13100	8020	10160	6130	(34.4)
Ground Line	kg			*10240	*10240	*17910	10550	11220	6750	7800	4760	5810	3520	4790	2880	10.19
	lb			*22580	*22580	*39480	23260	24740	14880	17200	10490	12810	7760	10560	6350	(33.4)
-1.5 m (-5.0 ft)	kg	*11380	*11380	*14470	*14470	*18150	10400	11020	6570	7670	4640			5250	3180	9.63
	lb	*25090	*25090	*31900	*31900	*40010	22930	24290	14480	16910	10230			11570	7010	(31.6)
-3.0 m (-10.0 ft)	kg	*15350	*15350	*19470	*19470	*17370	10480	11020	6570	7680	4640			6220	3820	8.74
	lb	*33840	*33840	*42920	*42920	*38290	23100	24290	14480	16930	10230			13710	8420	(28.7)
-4.5 m (-15.0 ft)	kg			*21820	*21820	*15410	10760	11230	6750					*7480	5230	7.37
	lb			*48100	*48100	*33970	23720	24760	14880					*16490	11530	(24.2)
-6.0 m (-20.0 ft)	kg					*11340	11330									
	lb					*25000	24980									

(5) 6.45 m (21' 2") boom, 4.05 m (13' 3") arm equipped with 1.44 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 6200 kg (13670 lb) counterweight.

Load point height		Load radius												At max. reach		
		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		9.0 m (30.0 ft)		Capacity		Reach
																m (ft)
7.5 m (25.0 ft)	kg													*5250	3470	10.00
	lb													*11570	7650	(32.8)
6.0 m (20.0 ft)	kg											*4530	4190	4730	2920	10.71
	lb											*9990	9240	10430	6440	(35.1)
4.5 m (15.0 ft)	kg									*6270	5760	*5750	4060	4300	2600	11.13
	lb									*13820	12700	*12680	8950	9480	5730	(36.5)
3.0 m (10.0 ft)	kg			*18220	*18220	*11250	*11250	*8610	7940	*7280	5420	6190	3870	4080	2430	11.32
	lb			*40170	*40170	*24800	*24800	*18980	17500	*16050	11950	13650	8530	8990	5360	(37.1)
1.5 m (5.0 ft)	kg			*10440	*10440	*14750	11530	*10470	7320	8160	5070	5980	3670	4030	2370	11.29
	lb			*23020	*23020	*32520	25420	*23080	16140	17990	11180	13180	8090	8880	5220	(37.0)
Ground Line	kg			*10810	*10810	*17060	10740	11340	6840	7840	4790	5790	3500	4150	2440	11.03
	lb			*23830	*23830	*37610	23680	25000	15080	17280	10560	12760	7720	9150	5380	(36.2)
-1.5 m (-5.0 ft)	kg	*9850	*9850	*13390	*13390	*18030	10390	11020	6560	7630	4600	5680	3390	4480	2660	10.52
	lb	*21720	*21720	*29520	*29520	*39750	22910	24290	14460	16820	10140	12520	7470	9880	5860	(34.5)
-3.0 m (-10.0 ft)	kg	*13020	*13020	*16980	*16980	*17900	10330	10910	6470	7560	4530	5670	3380	5140	3100	9.72
	lb	*28700	*28700	*37430	*37430	*39460	22770	24050	14260	16670	9990	12500	7450	11330	6830	(31.9)
-4.5 m (-15.0 ft)	kg	*16670	*16670	*21800	*21800	*16680	10480	11000	6540	7640	4600			6480	3980	8.53
	lb	*36750	*36750	*48060	*48060	*36770	23100	24250	14420	16840	10140			14290	8770	(28.0)
-6.0 m (-20.0 ft)	kg			*20030	*20030	*13950	10870	*10120	6820					*6790	6160	6.71
	lb			*44160	*44160	*30750	23960	*22310	15040					*14970	13580	(22.0)

(6) 6.45 m (21' 2") boom, 2.5 m (8' 2") arm equipped with 1.44 m³ (SAE heaped) bucket and 800 mm (32") triple grouser shoe and 6200 kg (13670 lb) counterweight.

Load point height		Load radius										At max. reach		
		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		9.0 m (30.0 ft)		Capacity		Reach
														m (ft)
7.5 m (25.0 ft)	kg											*6720	4990	8.34
	lb											*14820	11000	(27.4)
6.0 m (20.0 ft)	kg							*7320	5920			6370	4050	9.19
	lb							*16140	13050			14040	8930	(30.2)
4.5 m (15.0 ft)	kg			*11600	*11600	*9120	8340	*7930	5710			5680	3550	9.70
	lb			*25570	*25570	*20110	18390	*17480	12590			12520	7830	(31.8)
3.0 m (10.0 ft)	kg			*15130	12080	*10770	7780	8610	5430			5370	3310	9.92
	lb			*33360	26630	*23740	17150	18980	11970			11840	7300	(32.5)
1.5 m (5.0 ft)	kg			*17590	11230	11950	7300	8320	5170	6180	3810	5330	3270	9.88
	lb			*38780	24760	26350	16090	18340	11400	13620	8400	11750	7210	(32.4)
Ground Line	kg			*18360	10940	11630	7020	8130	4990			5580	3420	9.57
	lb			*40480	24120	25640	15480	17920	11000			12300	7540	(31.4)
-1.5 m (-5.0 ft)	kg	*15010	*15010	*18010	10930	11520	6920	8050	4930			6220	3840	8.97
	lb	*33090	*33090	*39710	24100	25400	15260	17750	10870			13710	8470	(29.4)
-3.0 m (-10.0 ft)	kg	*22800	*22800	*16720	11110	11610	7000					7600	4740	7.98
	lb	*50270	*50270	*36860	24490	25600	15430					16760	10450	(26.2)
-4.5 m (-15.0 ft)	kg	*19110	*19110	*14080	11480	*10340	7290					*7300	7000	6.42
	lb	*42130	*42130	*31040	25310	*22800	16070					*16090	15430	(21.1)

(7) 6.45 m (21' 2") boom, 3.2 m (10' 6") arm equipped with 1.44 m³ (SAE heaped) bucket and 800 mm (32") triple grouser shoe and 6200 kg (13670 lb) counterweight.

Load point height		Load radius												At max. reach		
		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		9.0 m (30.0 ft)		Capacity		Reach
																m (ft)
7.5 m (25.0 ft)	kg									*5240	*5240			*5970	4320	9.06
	lb									*11550	*11550			*13160	9520	(29.7)
6.0 m (20.0 ft)	kg									*6500	6030			5670	3570	9.84
	lb									*14330	13290			12500	7870	(32.3)
4.5 m (15.0 ft)	kg							*8090	*8090	*7190	5780	*5440	4100	5110	3160	10.31
	lb							*17840	*17840	*15850	12740	*11990	9040	11270	6970	(33.8)
3.0 m (10.0 ft)	kg					*13400	12480	*9820	7900	*8110	5460	6330	3940	4830	2940	10.52
	lb					*29540	27510	*21650	17420	*17880	12040	13960	8690	10650	6480	(34.5)
1.5 m (5.0 ft)	kg					*16400	11410	*11460	7340	8320	5160	6150	3780	4780	2890	10.48
	lb					*36160	25150	*25260	16180	18340	11380	13560	8330	10540	6370	(34.4)
Ground Line	kg			*10240	*10240	*17910	10880	11590	6970	8070	4930	6010	3650	4960	2990	10.19
	lb			*22580	*22580	*39480	23990	25550	15370	17790	10870	13250	8050	10930	6590	(33.4)
-1.5 m (-5.0 ft)	kg	*11380	*11380	*14470	*14470	*18150	10730	11390	6790	7930	4800			5440	3300	9.63
	lb	*25090	*25090	*31900	*31900	*40010	23660	25110	14970	17480	10580			11990	7280	(31.6)
-3.0 m (-10.0 ft)	kg	*15350	*15350	*19470	*19470	*17370	10810	11390	6790	7940	4810			6430	3960	8.74
	lb	*33840	*33840	*42920	*42920	*38290	23830	25110	14970	17500	10600			14180	8730	(28.7)
-4.5 m (-15.0 ft)	kg			*21820	*21820	*15410	11090	*11430	6970					*7480	5400	7.37
	lb			*48100	*48100	*33970	24450	*25200	15370					*16490	11900	(24.2)
-6.0 m (-20.0 ft)	kg					*11340	*11340									
	lb					*25000	*25000									

(8) 6.45 m (21' 2") boom, 4.05 m (13' 3") arm equipped with 1.44 m³ (SAE heaped) bucket and 800 mm (32") triple grouser shoe and 6200 kg (13670 lb) counterweight.

Load point height		Load radius												At max. reach		
		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		9.0 m (30.0 ft)		Capacity		Reach
																m (ft)
7.5 m (25.0 ft)	kg													*5250	3590	10.00
	lb													*11570	7910	(32.8)
6.0 m (20.0 ft)	kg											*4530	4330	4890	3030	10.71
	lb											*9990	9550	10780	6680	(35.1)
4.5 m (15.0 ft)	kg									*6270	5930	*5750	4190	4460	2710	11.13
	lb									*13820	13070	*12680	9240	9830	5970	(36.5)
3.0 m (10.0 ft)	kg			*18220	*18220	*11250	*11250	*8610	8170	*7280	5590	6400	4000	4240	2530	11.32
	lb			*40170	*40170	*24800	*24800	*18980	18010	*16050	12320	14110	8820	9350	5580	(37.1)
1.5 m (5.0 ft)	kg			*10440	*10440	*14750	11870	*10470	7540	*8360	5240	6180	3800	4190	2480	11.29
	lb			*23020	*23020	*32520	26170	*23080	16620	*18430	11550	13620	8380	9240	5470	(37.0)
Ground Line	kg			*10810	*10810	*17060	11070	11710	7070	8100	4950	6000	3640	4310	2550	11.03
	lb			*23830	*23830	*37610	24410	25820	15590	17860	10910	13230	8020	9500	5620	(36.2)
-1.5 m (-5.0 ft)	kg	*9850	*9850	*13390	*13390	*18030	10720	11390	6790	7900	4770	5890	3530	4650	2770	10.52
	lb	*21720	*21720	*29520	*29520	*39750	23630	25110	14970	17420	10520	12990	7780	10250	6110	(34.5)
-3.0 m (-10.0 ft)	kg	*13020	*13020	*16980	*16980	*17900	10660	11280	6690	7820	4700	5870	3520	5330	3220	9.72
	lb	*28700	*28700	*37430	*37430	*39460	23500	24870	14750	17240	10360	12940	7760	11750	7100	(31.9)
-4.5 m (-15.0 ft)	kg	*16670	*16670	*21800	*21800	*16680	10820	11360	6760	7900	4770			6700	4120	8.53
	lb	*36750	*36750	*48060	*48060	*36770	23850	25040	14900	17420	10520			14770	9080	(28.0)
-6.0 m (-20.0 ft)	kg			*20030	*20030	*13950	11200	*10120	7040					*6790	6360	6.71
	lb			*44160	*44160	*30750	24690	*22310	15520					*14970	14020	(22.0)

2) R320NLC-9

(1) 6.15 m (20' 2") boom, 2.2 m (7' 3") arm equipped with 1.44 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 6200 kg (13670 lb) counterweight.

•  : Rating over-front

•  : Rating over-side or 360 degree

Load point height		Load radius								At max. reach		
		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		Capacity		Reach
												m (ft)
7.5 m (25.0 ft)	kg lb									*7480 *16490	4800 10580	7.69 (25.2)
6.0 m (20.0 ft)	kg lb					*8380 *18470	7360 16230	*8070 *17790	4860 10710	6950 15320	3770 8310	8.61 (28.2)
4.5 m (15.0 ft)	kg lb			*12080 *26630	11110 24490	*9630 *21230	6970 15370	*8490 *18720	4730 10430	6130 13510	3250 7170	9.16 (30.1)
3.0 m (10.0 ft)	kg lb			*15590 *34370	9990 22020	*11230 *24760	6490 14310	8440 18610	4510 9940	5770 12720	3000 6610	9.39 (30.8)
1.5 m (5.0 ft)	kg lb			*18040 *39770	9250 20390	*11790 *25990	6080 13400	8190 18060	4290 9460	5740 12650	2960 6530	9.35 (30.7)
Ground Line	kg lb			*18760 *41360	8990 19820	11500 25350	5830 12850	8030 17700	4150 9150	6050 13340	3120 6880	9.02 (29.6)
-1.5 m (-5.0 ft)	kg lb	*16910 *37280	*16910 *37280	*18280 *40300	8980 19800	11410 25150	5760 12700	7990 17610	4120 9080	6860 15120	3580 7890	8.37 (27.5)
-3.0 m (-10 ft)	kg lb	*22970 *50640	18530 40850	*16880 *36770	9160 20190	11520 25400	5860 12920			*8360 *18430	4600 10140	7.29 (23.9)
-4.5 m (-15.0 ft)	kg lb	*17920 *39510	*17920 *39510	*13190 *29080	9560 21080							

- Note
1. Lifting capacity are based on SAE J1097 and ISO 10567.
 2. Lifting capacity of the ROBEX series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
 3. The load point is a hook located on the back of the bucket.
 4. *indicates load limited by hydraulic capacity.

(2) 6.45 m (21' 2") boom, 2.2 m (7' 3") arm equipped with 1.44 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 6200 kg (13670 lb) counterweight.

Load point height		Load radius								At max. reach		
		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		Capacity		Reach
												m (ft)
7.5 m (25.0 ft)	kg									*7120	4300	8.07
	lb									*15700	9480	(26.5)
6.0 m (20.0 ft)	kg					*8220	7230	*7700	4800	6410	3410	8.95
	lb					*18120	15940	*16980	10580	14130	7520	(29.4)
4.5 m (15.0 ft)	kg			*12360	10750	*9550	6780	*8250	4620	5690	2950	9.47
	lb			*27250	23700	*21050	14950	*18190	10190	12540	6500	(31.1)
3.0 m (10.0 ft)	kg					*11160	6270	8290	4370	5360	2730	9.70
	lb					*24600	13820	18280	9630	11820	6020	(31.8)
1.5 m (5.0 ft)	kg					11520	5850	8030	4140	5330	2690	9.66
	lb					25400	12900	17700	9130	11750	5930	(31.7)
Ground Line	kg			*18480	8670	11240	5620	7860	3990	5610	2830	9.34
	lb			*40740	19110	24780	12390	17330	8800	12370	6240	(30.6)
-1.5 m (-5.0 ft)	kg	*14420	*14420	*17900	8710	11170	5560	7810	3950	6310	3230	8.72
	lb	*31790	*31790	*39460	19200	24630	12260	17220	8710	13910	7120	(28.6)
-3.0 m (-10 ft)	kg	*22140	18200	*16390	8900	11290	5660			7840	4100	7.70
	lb	*48810	40120	*36130	19620	24890	12480			17280	9040	(25.3)
-4.5 m (-15.0 ft)	kg	*17840	*17840	*13410	9290							
	lb	*39330	*39330	*29560	20480							

(3) 6.45 m (21' 2") boom, 2.5 m (8' 2") arm equipped with 1.44 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 6200 kg (13670 lb) counterweight.

Load point height		Load radius										At max. reach		
		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		9.0 m (30.0 ft)		Capacity		Reach
														m (ft)
7.5 m (25.0 ft)	kg											*6720	4060	8.34
	lb											*14820	8950	(27.4)
6.0 m (20.0 ft)	kg							*7320	4840			6130	3240	9.19
	lb							*16140	10670			13510	7140	(30.2)
4.5 m (15.0 ft)	kg			*11600	10900	*9120	6830	*7930	4630			5460	2810	9.70
	lb			*25570	24030	*20110	15060	*17480	10210			12040	6190	(31.8)
3.0 m (10.0 ft)	kg			*15130	9660	*10770	6290	8290	4360			5140	2590	9.92
	lb			*33360	21300	*23740	13870	18280	9610			11330	5710	(32.5)
1.5 m (5.0 ft)	kg			*17590	8850	11510	5830	8000	4110	5930	2990	5110	2540	9.88
	lb			*38780	19510	25380	12850	17640	9060	13070	6590	11270	5600	(32.4)
Ground Line	kg			*18360	8580	11190	5560	7810	3940			5340	2670	9.57
	lb			*40480	18920	24670	12260	17220	8690			11770	5890	(31.4)
-1.5 m (-5.0 ft)	kg	*15010	*15010	*18010	8570	11080	5470	7740	3880			5960	3010	8.97
	lb	*33090	*33090	*39710	18890	24430	12060	17060	8550			13140	6640	(29.4)
-3.0 m (-10.0 ft)	kg	*22800	17860	*16720	8740	11170	5540					7300	3770	7.98
	lb	*50270	39370	*36860	19270	24630	12210					16090	8310	(26.2)
-4.5 m (-15.0 ft)	kg	*19110	18460	*14080	9090	*10340	5820					*7300	5660	6.42
	lb	*42130	40700	*31040	20040	*22800	12830					*16090	12480	(21.1)

(4) 6.45 m (21' 2") boom, 3.2 m (10' 6") arm equipped with 1.44 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 6200 kg (13670 lb) counterweight.

Load point height		Load radius												At max. reach		
		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		9.0 m (30.0 ft)		Capacity		Reach
																m (ft)
7.5 m (25.0 ft)	kg									*5240	5060			*5970	3490	9.06
	lb									*11550	11160			*13160	7690	(29.7)
6.0 m (20.0 ft)	kg									*6500	4950			5450	2840	9.84
	lb									*14330	10910			12020	6260	(32.3)
4.5 m (15.0 ft)	kg							*8090	6990	*7190	4700	*5440	3270	4900	2470	10.31
	lb							*17840	15410	*15850	10360	*11990	7210	10800	5450	(33.8)
3.0 m (10.0 ft)	kg					*13400	10030	*9820	6400	*8110	4400	6070	3120	4630	2270	10.52
	lb					*29540	22110	*21650	14110	*17880	9700	13380	6880	10210	5000	(34.5)
1.5 m (5.0 ft)	kg					*16400	9010	*11460	5870	8000	4100	5900	2960	4580	2220	10.48
	lb					*36160	19860	*25260	12940	17640	9040	13010	6530	10100	4890	(34.4)
Ground Line	kg			*10240	*10240	*17910	8520	11150	5510	7750	3880	5760	2840	4750	2300	10.19
	lb			*22580	*22580	*39480	18780	24580	12150	17090	8550	12700	6260	10470	5070	(33.4)
-1.5 m (-5.0 ft)	kg	*11380	*11380	*14470	*14470	*18150	8380	10950	5340	7610	3760			5210	2560	9.63
	lb	*25090	*25090	*31900	*31900	*40010	18470	24140	11770	16780	8290			11490	5640	(31.6)
-3.0 m (-10.0 ft)	kg	*15350	*15350	*19470	17250	*17370	8450	10950	5340	7620	3770			6170	3100	8.74
	lb	*33840	*33840	*42920	38030	*38290	18630	24140	11770	16800	8310			13600	6830	(28.7)
-4.5 m (-15.0 ft)	kg			*21820	17780	*15410	8720	11150	5510					*7480	4310	7.37
	lb			*48100	39200	*33970	19220	24580	12150					*16490	9500	(24.2)
-6.0 m (-20.0 ft)	kg					*11340	9260									
	lb					*25000	20410									

(5) 6.45 m (21' 2") boom, 4.05 m (13' 3") arm equipped with 1.44 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 6200 kg (13670 lb) counterweight.

Load point height		Load radius												At max. reach		
		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		9.0 m (30.0 ft)		Capacity		Reach
																m (ft)
7.5 m (25.0 ft)	kg													*5250	2870	10.00
	lb													*11570	6330	(32.8)
6.0 m (20.0 ft)	kg											*4530	3500	4690	2370	10.71
	lb											*9990	7720	10340	5220	(35.1)
4.5 m (15.0 ft)	kg									*6270	4850	*5750	3360	4270	2080	11.13
	lb									*13820	10690	*12680	7410	9410	4590	(36.5)
3.0 m (10.0 ft)	kg			*18220	*18220	*11250	10650	*8610	6650	*7280	4520	6150	3180	4050	1920	11.32
	lb			*40170	*40170	*24800	23480	*18980	14660	*16050	9960	13560	7010	8930	4230	(37.1)
1.5 m (5.0 ft)	kg			*10440	*10440	*14750	9450	*10470	6050	8100	4180	5930	2980	4000	1870	11.29
	lb			*23020	*23020	*32520	20830	*23080	13340	17860	9220	13070	6570	8820	4120	(37.0)
Ground Line	kg			*10810	*10810	*17060	8700	11270	5600	7790	3900	5750	2820	4120	1920	11.03
	lb			*23830	*23830	*37610	19180	24850	12350	17170	8600	12680	6220	9080	4230	(36.2)
-1.5 m (-5.0 ft)	kg	*9850	*9850	*13390	*13390	*18030	8370	10950	5330	7580	3720	5640	2710	4450	2100	10.52
	lb	*21720	*21720	*29520	*29520	*39750	18450	24140	11750	16710	8200	12430	5970	9810	4630	(34.5)
-3.0 m (-10.0 ft)	kg	*13020	*13020	*16980	16870	*17900	8310	10840	5240	7500	3650	5620	2700	5110	2480	9.72
	lb	*28700	*28700	*37430	37190	*39460	18320	23900	11550	16530	8050	12390	5950	11270	5470	(31.9)
-4.5 m (-15.0 ft)	kg	*16670	*16670	*21800	17260	*16680	8450	10920	5310	7580	3720			6430	3240	8.53
	lb	*36750	*36750	*48060	38050	*36770	18630	24070	11710	16710	8200			14180	7140	(28.0)
-6.0 m (-20.0 ft)	kg			*20030	17960	*13950	8820	*10120	5580					*6790	5100	6.71
	lb			*44160	39590	*30750	19440	*22310	12300					*14970	11240	(22.0)

3) R320LC-9 HIGH WALKER

(1) 6.15 m (20' 2") boom, 2.2 m (7' 3") arm equipped with 1.44 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 6200 kg (13670 lb) counterweight.

•  : Rating over-front

•  : Rating over-side or 360 degree

Load point height		Load radius								At max. reach		
		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		Capacity		Reach
												m (ft)
7.5 m (25.0 ft)	kg lb									*7480 *16490	6320 13930	7.90 (25.9)
6.0 m (20.0 ft)	kg lb					*8560 *18870	*8560 *18870	*8100 *17860	6760 14900	7540 16620	5180 11420	8.74 (28.7)
4.5 m (15.0 ft)	kg lb			*12730 *28060	*12730 *28060	*9910 *21850	9560 21080	*8620 *19000	6600 14550	6770 14930	4610 10160	9.22 (30.2)
3.0 m (10.0 ft)	kg lb			*16170 *35650	14130 31150	*11520 *25400	9050 19950	9360 20640	6360 14020	6460 14240	4360 9610	9.40 (30.8)
1.5 m (5.0 ft)	kg lb			*18290 *40320	13420 29590	*12850 *28330	8650 19070	9120 20110	6140 13540	6500 14330	4370 9630	9.31 (30.5)
Ground Line	kg lb			*18750 *41340	13200 29100	12790 28200	8420 18560	8980 19800	6010 13250	6920 15260	4660 10270	8.93 (29.3)
-1.5 m (-5.0 ft)	kg lb	*18620 *41050	*18620 *41050	*18070 *39840	13240 29190	12740 28090	8380 18470	8970 19780	6000 13230	7950 17530	5370 11840	8.21 (26.9)
-3.0 m (-10 ft)	kg lb	*22250 *49050	*22250 *49050	*16210 *35740	13470 29700	*12030 *26520	8520 18780			*8240 *18170	7000 15430	7.03 (23.1)
-4.5 m (-15.0 ft)	kg lb			*12130 *26740	*12130 *26740							

- Note
1. Lifting capacity are based on SAE J1097 and ISO 10567.
 2. Lifting capacity of the ROBEX series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
 3. The load point is a hook located on the back of the bucket.
 4. * indicates load limited by hydraulic capacity.

(2) 6.45 m (21' 2") boom, 2.2 m (7' 3") arm equipped with 1.44 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 6200 kg (13670 lb) counterweight.

Load point height		Load radius								At max. reach		
		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		Capacity		Reach
												m (ft)
7.5 m (25.0 ft)	kg lb									*7120 *15700	5750 12680	8.27 (27.1)
6.0 m (20.0 ft)	kg lb					*8420 *18560	*8420 *18560	*7770 *17130	6690 14750	6990 15410	4760 10490	9.07 (29.8)
4.5 m (15.0 ft)	kg lb			*13030 *28730	*13030 *28730	*9840 *21690	9360 20640	*8390 *18500	6480 14290	6310 13910	4250 9370	9.53 (31.3)
3.0 m (10.0 ft)	kg lb					*11450 *25240	8820 19440	*9200 *20280	6210 13690	6030 13290	4030 8880	9.71 (31.9)
1.5 m (5.0 ft)	kg lb					*12720 *28040	8410 18540	8960 19750	5990 13210	6060 13360	4040 8910	9.62 (31.6)
Ground Line	kg lb			*18430 *40630	12880 28400	12540 27650	8190 18060	8810 19420	5850 12900	6430 14180	4290 9460	9.25 (30.3)
-1.5 m (-5.0 ft)	kg lb	*16090 *35470	*16090 *35470	*17690 *39000	12950 28550	12510 27580	8160 17990	8790 19380	5830 12850	7320 16140	4910 10820	8.56 (28.1)
-3.0 m (-10 ft)	kg lb	*21530 *47470	*21530 *47470	*15980 *35230	13200 29100	*12030 *26520	8310 18320			*7840 *17280	6260 13800	7.45 (24.4)
-4.5 m (-15.0 ft)	kg lb			*12550 *27670	*12550 *27670							

(3) 6.45 m (21' 2") boom, 2.5 m (8' 2") arm equipped with 1.44 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 6200 kg (13670 lb) counterweight.

Load point height		Load radius										At max. reach		
		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		9.0 m (30.0 ft)		Capacity		Reach
														m (ft)
7.5 m (25.0 ft)	kg lb											*6730 *14840	5460 12040	8.53 (28.0)
6.0 m (20.0 ft)	kg lb							*7410 *16340	6730 14840			6700 14770	4550 10030	9.31 (30.5)
4.5 m (15.0 ft)	kg lb			*12260 *27030	*12260 *27030	*9420 *20770	9410 20750	*8070 *17790	6490 14310			6060 13360	4070 8970	9.76 (32.0)
3.0 m (10.0 ft)	kg lb			*15720 *34660	13750 30310	*11070 *24410	8840 19490	*8930 *19690	6210 13690	6790 14970	4550 10030	5790 12760	3860 8510	9.93 (32.6)
1.5 m (5.0 ft)	kg lb			*17850 *39350	13000 28660	*12430 *27400	8380 18470	8930 19690	5960 13140			5810 12810	3850 8490	9.84 (32.3)
Ground Line	kg lb			*18370 *40500	12770 28150	12480 27510	8130 17920	8750 19290	5790 12760			6140 13540	4070 8970	9.48 (31.1)
-1.5 m (-5.0 ft)	kg lb	*16360 *36070	*16360 *36070	*17850 *39350	12800 28220	12410 27360	8070 17790	8710 19200	5750 12680			6930 15280	4620 10190	8.82 (28.9)
-3.0 m (-10.0 ft)	kg lb	*22580 *49780	*22580 *49780	*16360 *36070	13020 28700	*12250 *27010	8180 18030					*7890 *17390	5800 12790	7.75 (25.4)
-4.5 m (-15.0 ft)	kg lb	*18050 *39790	*18050 *39790	*13340 *29410	*13340 *29410									

(4) 6.45 m (21' 2") boom, 3.2 m (10' 6") arm equipped with 1.44 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 6200 kg (13670 lb) counterweight.

Load point height		Load radius												At max. reach		
		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		9.0 m (30.0 ft)		Capacity		Reach
																m (ft)
7.5 m (25.0 ft)	kg									*5730	*5730			*5990	4770	9.24
	lb									*12630	*12630			*13210	10520	(30.3)
6.0 m (20.0 ft)	kg									*6600	*6600			*6010	4040	9.95
	lb									*14550	*14550			*13250	8910	(32.6)
4.5 m (15.0 ft)	kg							*8400	*8400	*7350	6560	*5820	4720	5490	3640	10.37
	lb							*18520	*18520	*16200	14460	*12830	10410	12100	8020	(34.0)
3.0 m (10.0 ft)	kg					*14050	*14050	*10150	8950	*8290	6240	6830	4560	5250	3450	10.53
	lb					*30970	*30970	*22380	19730	*18280	13760	15060	10050	11570	7610	(34.5)
1.5 m (5.0 ft)	kg					*16800	13130	*11720	8410	8950	5940	6660	4400	5240	3430	10.45
	lb					*37040	28950	*25840	18540	19730	13100	14680	9700	11550	7560	(34.3)
Ground Line	kg			*10990	*10990	*18040	12680	12470	8070	8710	5720	6530	4280	5490	3590	10.11
	lb			*24230	*24230	*39770	27950	27490	17790	19200	12610	14400	9440	12100	7910	(33.2)
-1.5 m (-5.0 ft)	kg	*12090	*12090	*15330	*15330	*18080	12580	12310	7920	8600	5620			6080	3990	9.50
	lb	*26650	*26650	*33800	*33800	*39860	27730	27140	17460	18960	12390			13400	8800	(31.2)
-3.0 m (-10.0 ft)	kg	*16150	*16150	*20540	*20540	*17110	12700	12340	7960	8640	5660			7290	4830	8.53
	lb	*35600	*35600	*45280	*45280	*37720	28000	27210	17550	19050	12480			16070	10650	(28.0)
-4.5 m (-15.0 ft)	kg			*20940	*20940	*14870	13030	*10980	8180					*7390	6780	7.03
	lb			*46160	*46160	*32780	28730	*24210	18030					*16290	14950	(23.1)

(5) 6.45 m (21' 2") boom, 4.05 m (13' 3") arm equipped with 1.44 m³ (SAE heaped) bucket and 600 mm (24") triple grouser shoe and 6200 kg (13670 lb) counterweight.

Load point height		Load radius												At max. reach		
		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		9.0 m (30.0 ft)		Capacity		Reach
																m (ft)
7.5 m (25.0 ft)	kg											*3030	*3030	*5280	4020	10.16
	lb											*6680	*6680	*11640	8860	(33.3)
6.0 m (20.0 ft)	kg											*4770	*4770	5200	3470	10.81
	lb											*10520	*10520	11460	7650	(35.5)
4.5 m (15.0 ft)	kg									*6440	*6440	*5980	4810	4790	3150	11.19
	lb									*14200	*14200	*13180	10600	10560	6940	(36.7)
3.0 m (10.0 ft)	kg			*20040	*20040	*11950	*11950	*8970	*8970	*7490	6360	*6650	4610	4600	2990	11.33
	lb			*44180	*44180	*26350	*26350	*19780	*19780	*16510	14020	*14660	10160	10140	6590	(37.2)
1.5 m (5.0 ft)	kg			*10150	*10150	*15290	13560	*10790	8600	*8550	6010	6660	4420	4580	2960	11.26
	lb			*22380	*22380	*33710	29890	*23790	18960	*18850	13250	14680	9740	10100	6530	(36.9)
Ground Line	kg	*7400	*7400	*11200	*11200	*17340	12840	*12170	8150	8710	5740	6490	4250	4760	3080	10.95
	lb	*16310	*16310	*24690	*24690	*38230	28310	*26830	17970	19200	12650	14310	9370	10490	6790	(35.9)
-1.5 m (-5.0 ft)	kg	*10420	*10420	*13990	*13990	*18090	12540	12240	7900	8520	5570	6390	4160	5180	3370	10.39
	lb	*22970	*22970	*30840	*30840	*39880	27650	26980	17420	18780	12280	14090	9170	11420	7430	(34.1)
-3.0 m (-10.0 ft)	kg	*13660	*13660	*17770	*17770	*17760	12520	12170	7830	8470	5520			5990	3940	9.53
	lb	*30120	*30120	*39180	*39180	*39150	27600	26830	17260	18670	12170			13210	8690	(31.3)
-4.5 m (-15.0 ft)	kg	*17430	*17430	*22910	*22910	*16310	12720	*12000	7940	8590	5630			*7060	5110	8.25
	lb	*38430	*38430	*50510	*50510	*35960	28040	*26460	17500	18940	12410			*15560	11270	(27.1)
-6.0 m (-20.0 ft)	kg			*18860	*18860	*13180	*13180	*9410	8290							
	lb			*41580	*41580	*29060	*29060	*20750	18280							

(6) 6.45 m (21' 2") boom, 2.5 m (8' 2") arm equipped with 1.44 m³ (SAE heaped) bucket and 710 mm (28") double grouser shoe and 6200 kg (13670 lb) counterweight.

Load point height		Load radius										At max. reach		
		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		9.0 m (30.0 ft)		Capacity		Reach
														m (ft)
7.5 m (25.0 ft)	kg											*6730	5660	8.53
	lb											*14840	12480	(28.0)
6.0 m (20.0 ft)	kg							*7410	6960			*6840	4730	9.31
	lb							*16340	15340			*15080	10430	(30.5)
4.5 m (15.0 ft)	kg			*12260	*12260	*9420	*9420	*8070	6720			6310	4240	9.76
	lb			*27030	*27030	*20770	*20770	*17790	14820			13910	9350	(32.0)
3.0 m (10.0 ft)	kg			*15720	14220	*11070	9150	*8930	6440	7060	4740	6030	4020	9.93
	lb			*34660	31350	*24410	20170	*19690	14200	15560	10450	13290	8860	(32.6)
1.5 m (5.0 ft)	kg			*17850	13460	*12430	8690	9280	6190			6050	4020	9.84
	lb			*39350	29670	*27400	19160	20460	13650			13340	8860	(32.3)
Ground Line	kg			*18370	13240	12960	8440	9100	6030			6390	4250	9.48
	lb			*40500	29190	28570	18610	20060	13290			14090	9370	(31.1)
-1.5 m (-5.0 ft)	kg	*16360	*16360	*17850	13270	12890	8380	9050	5980			7210	4810	8.82
	lb	*36070	*36070	*39350	29260	28420	18470	19950	13180			15900	10600	(28.9)
-3.0 m (-10.0 ft)	kg	*22580	*22580	*16360	13480	*12250	8490					*7890	6020	7.75
	lb	*49780	*49780	*36070	29720	*27010	18720					*17390	13270	(25.4)
-4.5 m (-15.0 ft)	kg	*18050	*18050	*13340	*13340									
	lb	*39790	*39790	*29410	*29410									

(7) 6.45 m (21' 2") boom, 3.2 m (10' 6") arm equipped with 1.44 m³ (SAE heaped) bucket and 710 mm (28") double grouser shoe and 6200 kg (13670 lb) counterweight.

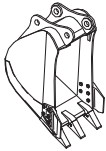
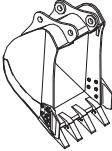
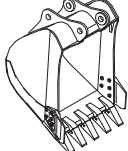
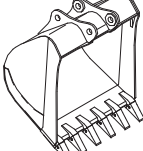
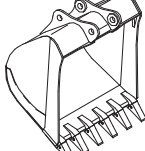
Load point height		Load radius										At max. reach		
		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		9.0 m (30.0 ft)		Reach
														m (ft)
7.5 m (25.0 ft)	kg									*5730	*5730			9.24
	lb									*12630	*12630			(30.3)
6.0 m (20.0 ft)	kg									*6600	*6600			9.95
	lb									*14550	*14550			(32.6)
4.5 m (15.0 ft)	kg							*8400	*8400	*7350	6790	*5820	4900	10.37
	lb							*18520	*18520	*16200	14970	*12830	10800	(34.0)
3.0 m (10.0 ft)	kg					*14050	*14050	*10150	9260	*8290	6470	7080	4740	10.53
	lb					*30970	*30970	*22380	20410	*18280	14260	15610	10450	(34.5)
1.5 m (5.0 ft)	kg					*16800	13600	*11720	8720	*9210	6170	6900	4580	10.45
	lb					*37040	29980	*25840	19220	*20300	13600	15210	10100	(34.3)
Ground Line	kg			*10990	*10990	*18040	13150	*12750	8380	9030	5950	6780	4470	10.11
	lb			*24230	*24230	*39770	28990	*28110	18470	19910	13120	14950	9850	(33.2)
-1.5 m (-5.0 ft)	kg	*12090	*12090	*15330	*15330	*18080	13040	12740	8230	8920	5850			9.50
	lb	*26650	*26650	*33800	*33800	*39860	28750	28090	18140	19670	12900			(31.2)
-3.0 m (-10.0 ft)	kg	*16150	*16150	*20540	*20540	*17110	13160	*12630	8260	8960	5890			8.53
	lb	*35600	*35600	*45280	*45280	*37720	29010	*27840	18210	19750	12990			(28.0)
-4.5 m (-15.0 ft)	kg			*20940	*20940	*14870	13500	*10980	8490					7.03
	lb			*46160	*46160	*32780	29760	*24210	18720					(23.1)

(8) 6.45 m (21' 2") boom, 4.05 m (13' 3") arm equipped with 1.44 m³ (SAE heaped) bucket and 710 mm (28") double grouser shoe and 6200 kg (13670 lb) counterweight.

Load point height		Load radius												At max. reach				
		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		9.0 m (30.0 ft)		Capacity		Reach		
																m (ft)		
7.5 m (25.0 ft)	kg													*3030	*3030	*5280	4180	10.16
	lb													*6680	*6680	*11640	9220	(33.3)
6.0 m (20.0 ft)	kg													*4770	*4770	5420	3620	10.81
	lb													*10520	*10520	11950	7980	(35.5)
4.5 m (15.0 ft)	kg									*6440	*6440	*5980	5000	5000	3290	11.19		
	lb									*14200	*14200	*13180	11020	11020	7250	(36.7)		
3.0 m (10.0 ft)	kg			*20040	*20040	*11950	*11950	*8970	*8970	*7490	6590	*6650	4800	4800	3130	11.33		
	lb			*44180	*44180	*26350	*26350	*19780	*19780	*16510	14530	*14660	10580	10580	6900	(37.2)		
1.5 m (5.0 ft)	kg			*10150	*10150	*15290	14030	*10790	8910	*8550	6240	6930	4600	4790	3110	11.26		
	lb			*22380	*22380	*33710	30930	*23790	19640	*18850	13760	15280	10140	10560	6860	(36.9)		
Ground Line	kg	*7400	*7400	*11200	*11200	*17340	13300	*12170	8460	9050	5970	6760	4440	4970	3220	10.95		
	lb	*16310	*16310	*24690	*24690	*38230	29320	*26830	18650	19950	13160	14900	9790	10960	7100	(35.9)		
-1.5 m (-5.0 ft)	kg	*10420	*10420	*13990	*13990	*18090	13010	12720	8210	8870	5800	6660	4350	5400	3520	10.39		
	lb	*22970	*22970	*30840	*30840	*39880	28680	28040	18100	19550	12790	14680	9590	11900	7760	(34.1)		
-3.0 m (-10.0 ft)	kg	*13660	*13660	*17770	*17770	*17760	12990	12650	8140	8820	5760			6250	4110	9.53		
	lb	*30120	*30120	*39180	*39180	*39150	28640	27890	17950	19440	12700			13780	9060	(31.3)		
-4.5 m (-15.0 ft)	kg	*17430	*17430	*22910	*22910	*16310	13190	*12000	8250	8940	5860			*7060	5310	8.25		
	lb	*38430	*38430	*50510	*50510	*35960	29080	*26460	18190	19710	12920			*15560	11710	(27.1)		
-6.0 m (-20.0 ft)	kg			*18860	*18860	*13180	*13180	*9410	8600									
	lb			*41580	*41580	*29060	*29060	*20750	18960									

6. BUCKET SELECTION GUIDE

1) GENERAL BUCKET

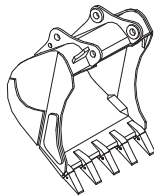
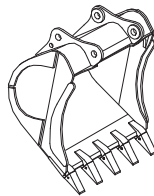
				
0.9 m³ SAE heaped bucket	1.14 m³ SAE heaped bucket	※ 1.44 m³ SAE heaped bucket	1.74 m³ SAE heaped bucket	2.10 m³ SAE heaped bucket

Capacity		Width		Weight	Recommendation				
					6.45 m (21' 2") boom				6.15 m (20' 2") boom
SAE heaped	CECE heaped	Without side cutter	With side cutter		2.2 m arm (7' 3")	2.5 m arm (8' 2")	3.2 m arm (10' 6")	4.05 m arm (13' 3")	2.2 m arm (7' 3")
0.9 m³ (1.18 yd³)	0.8 m³ (1.05 yd³)	950 mm (37.4")	1070 mm (42.1")	870 kg (1920 lb)					
1.14 m³ (1.49 yd³)	1.0 m³ (1.31 yd³)	1110 mm (43.7")	1230 mm (48.4")	980 kg (2160 lb)					
※ 1.44 m³ (1.88 yd³)	1.25 m³ (1.63 yd³)	1380 mm (54.3")	1500 mm (59.1")	1110 kg (2450 lb)					
1.74 m³ (2.28 yd³)	1.5 m³ (1.96 yd³)	1620 mm (63.8")	1740 mm (68.5")	1230 kg (2710 lb)					
2.10 m³ (2.75 yd³)	1.8 m³ (2.35 yd³)	1910 mm (75.2")	2030 mm (79.9")	1370 kg (3020 lb)					

※ : Standard bucket

-  Applicable for materials with density of 2000 kg/m³ (3370 lb/yd³) or less
-  Applicable for materials with density of 1600 kg/m³ (2700 lb/yd³) or less
-  Applicable for materials with density of 1100 kg/m³ (1850 lb/yd³) or less

2) ROCK AND HEAVY DUTY BUCKET

	
◆1.44 m ³ SAE heaped bucket	◎1.44 m ³ SAE ◎1.73 m ³ SAE heaped bucket

Capacity		Width		Weight	Recommendation				
					6.45 m (21' 2") boom				6.15 m (20' 2") boom
SAE heaped	CECE heaped	Without side cutter	With side cutter		2.2 m arm (7' 3")	2.5 m arm (8' 2")	3.2 m arm (10' 6")	4.05 m arm (13' 3")	2.2 m arm (7' 3")
◆1.44 m ³ (1.88 yd ³)	1.25 m ³ (1.63 yd ³)	1470 mm (57.9")	-	1380 kg (3040 lb)					
◎1.44 m ³ (1.88 yd ³)	1.25 m ³ (1.63 yd ³)	1470 mm (57.9")	-	1470 kg (3240 lb)					
◎1.73 m ³ (2.26 yd ³)	1.5 m ³ (1.96 yd ³)	1710 mm (67.3")	-	1610 kg (3550 lb)					

◆ : Heavy duty bucket

◎ : Rock bucket (esco type)

 Applicable for materials with density of 2000 kg/m³ (3370 lb/yd³) or less

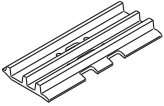
 Applicable for materials with density of 1600 kg/m³ (2700 lb/yd³) or less

7. UNDERCARRIAGE

1) TRACKS

X-leg type center frame is integrally welded with reinforced box-section track frames. The design includes dry tracks, lubricated rollers, idlers, sprockets, hydraulic track adjusters with shock absorbing springs and assembled track-type tractor shoes with triple grousers.

2) TYPES OF SHOES

Model	Shapes		Triple grouser			
						
R320LC-9	Shoe width	mm (in)	600(24)	700(28)	800(32)	900(36)
	Operating weight	kg (lb)	32200(71000)	32800(72300)	33200(73200)	33600(74100)
	Ground pressure	kgf/cm ² (psi)	0.63(8.96)	0.54(7.68)	0.48(6.83)	0.43(6' 11")
	Overall width	mm (ft-in)	3280(10' 9")	3380(11' 1")	3480(11' 5")	3580(11' 9")
R320NLC-9	Shoe width	mm (in)	600(24)	-	-	-
	Operating weight	kg (lb)	32000(70500)	-	-	-
	Ground pressure	kgf/cm ² (psi)	0.61(8.67)	-	-	-
	Overall width	mm (ft-in)	2990(9' 10")	-	-	-
R320LC-9 HIGH WALKER	Shoe width	mm (in)	600(24)	700(28)	800(32)	Double Grouser 710(28)
	Operating weight	kg (lb)	34700(76500)	35300(77800)	35700(78700)	35900(79100)
	Ground pressure	kgf/cm ² (psi)	0.67(9.53)	0.58(8.25)	0.51(7.25)	0.58(8.25)
	Overall width	mm (ft-in)	3470(11' 5")	3570(11' 9")	3670(12' 0")	3580(11' 9")

3) NUMBER OF ROLLERS AND SHOES ON EACH SIDE

Item	Quantity
Carrier rollers	2EA
Track rollers	9EA
Track shoes	48EA

4) SELECTION OF TRACK SHOE

Suitable track shoes should be selected according to operating conditions.

Method of selecting shoes

Confirm the category from the list of applications in **table 2**, then use **table 1** to select the shoe. Wide shoes (categories B and C) have limitations on applications. Before using wide shoes, check the precautions, then investigate and study the operating conditions to confirm if these shoes are suitable.

Select the narrowest shoe possible to meet the required flotation and ground pressure. Application of wider shoes than recommendations will cause unexpected problem such as bending of shoes, crack of link, breakage of pin, loosening of shoe bolts and the other various problems.

※ **Table 1**

Track shoe	Specification	Category
600 mm triple grouser	Standard	A
700 mm triple grouser	Option	B
710 mm double grouser	Option	B
800 mm triple grouser	Option	C
900 mm triple grouser	Option	C

※ **Table 2**

Category	Applications	Applications
A	Rocky ground, river beds, normal soil	• Travel at low speed on rough ground with large obstacles such as boulders or fallen trees
B	Normal soil, soft ground	• These shoes cannot be used on rough ground with large obstacles such as boulders or fallen trees • Travel at high speed only on flat ground • Travel slowly at low speed if it is impossible to avoid going over obstacles
C	Extremely soft ground (swampy ground)	• Use the shoes only in the conditions that the machine sinks and it is impossible to use the shoes of category A or B • These shoes cannot be used on rough ground with large obstacles such as boulders or fallen trees • Travel at high speed only on flat ground • Travel slowly at low speed if it is impossible to avoid going over obstacles

8. SPECIFICATIONS FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Cummins QSC
Type	4-cycle turbocharged charger air cooled diesel engine
Cooling method	Water cooling
Number of cylinders and arrangement	6 cylinders, in-line
Firing order	1-5-3-6-2-4
Combustion chamber type	Direct injection type
Cylinder bore × stroke	114 × 135 mm (4.49" × 5.32")
Piston displacement	8300 cc (506 cu in)
Compression ratio	17.5 : 1
Rated gross horse power (SAE J1995)	278 Hp at 1750 rpm (207 kW at 1750 rpm)
Maximum torque	123.7 kgf · m (895 lbf · ft) at 1500 rpm
Engine oil quantity	35 l (9.2 U.S. gal)
Dry weight	723 kg (1594 lb)
High idling speed	1750 + 50 rpm
Low idling speed	700 ± 50 rpm
Rated fuel consumption	168.9 g/Hp · hr at 1750 rpm
Starting motor	Denso (24V-7.5 kW)
Alternator	Delco Remy 24V-50A
Battery	2 × 12V × 160Ah

2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 × 154 cc/rev
Rated oil flow	2 × 270 l /min (71.3 U.S. gpm / 59.4 U.K. gpm)
Rated speed	1750 rpm

3) GEAR PUMP

Item	Specification
Type	Fixed displacement gear pump single stage
Capacity	15cc/rev
Maximum pressure	40 kgf/cm ² (570 psi)
Rated oil flow	26.3 l /min (6.9 U.S. gpm/5.8 U.K. gpm)

4) MAIN CONTROL VALVE

Item	Specification
Type	9 spools
Operating method	Hydraulic pilot system
Main relief valve pressure	350 kgf/cm ² (4980 psi) [380 kgf/cm ² (5400 psi)]
Overload relief valve pressure	400 kgf/cm ² (5690 psi)

[]: Power boost

5) SWING MOTOR

Item	Specification
Type	Axial piston motor
Capacity	169.4 cc/rev
Relief pressure	300 kgf/cm ² (4270 psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	70 kgf · m (505 lbf · ft)
Brake release pressure	26 kgf/cm ² (370 psi)
Reduction gear type	2 - stage planetary

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement bent-axis axial piston motor
Relief pressure	350 kgf/cm ² (4980 psi)
Capacity (max / min)	154.8/88.5 cc/rev
Reduction gear type	3-stage planetary
Braking system	Automatic, spring applied hydraulic released
Brake release pressure	9 kgf/cm ² (128 psi)
Braking torque	40 kgf · m (290 lbf · ft)

7) REMOTE CONTROL VALVE

Item		Specification
Type		Pressure reducing type
Operating pressure	Minimum	6.5 kg/cm ² (92 psi)
	Maximum	26 kg/cm ² (370 psi)
Single operation stroke	Lever	61 mm (2.4 in)
	Pedal	123 mm (4.84 in)

8) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Rod dia × Stroke	ø 150 × ø 105 × 1480 mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	ø 160 × ø 110 × 1685 mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	ø 140 × ø 100 × 1285 mm
	Cushion	Extend only

※ Discoloration of cylinder rod can occur when the friction reduction additive of lubrication oil spreads on the rod surface.

※ Discoloration does not cause any harmful effect on the cylinder performance.

9) SHOE

Item		Width	Ground pressure	Link quantity	Overall width
R320LC-9	Standard	☆600 mm (24")	0.62 kgf/cm ² (8.82 psi)	48	3280 mm (10' 9")
	Option	☆700 mm (28")	0.54 kgf/cm ² (7.68 psi)	48	3380 mm (11' 1")
		☆800 mm (32")	0.48 kgf/cm ² (6.83 psi)	48	3480 mm (11' 5")
		☆900 mm (36")	0.43 kgf/cm ² (6.11 psi)	48	3580 mm (11' 9")
R320NLC-9	Standard	☆600 mm (24")	0.61 kgf/cm ² (8.67 psi)	48	2990 mm (9' 10")
R320LC-9 H/WALKER	Standard	☆600 mm (24")	0.67 kgf/cm ² (9.53 psi)	48	3470 mm (11' 5")
	Option	☆700 mm (28")	0.58 kgf/cm ² (8.25 psi)	48	3570 mm (11' 9")
		☆800 mm (32")	0.51 kgf/cm ² (7.25 psi)	48	3670 mm (12' 0")
		★710 mm (28")	0.58 kgf/cm ² (8.25 psi)	48	3580 mm (11' 9")

☆ : Triple grouser

★ : Double grouser

10) BUCKET

Item		Capacity		Tooth quantity	Width	
		SAE heaped	CECE heaped		Without side cutter	With side cutter
R320LC-9 R320NLC-9 H/WALKER	Standard	1.44 m ³ (1.88 yd ³)	1.25 m ³ (1.63 yd ³)	5	1380 mm (54.3")	1500 mm (59.1")
	Option	0.9 m ³ (1.18 yd ³)	0.8 m ³ (1.05 yd ³)	3	950 mm (37.4")	1070 mm (42.1")
		1.14 m ³ (1.49 yd ³)	1.0 m ³ (1.31 yd ³)	4	1110 mm (43.7")	1230 mm (48.4")
		1.74 m ³ (2.28 yd ³)	1.5 m ³ (1.96 yd ³)	5	1620 mm (63.8")	1740 mm (68.5")
		2.10 m ³ (2.75 yd ³)	1.8 m ³ (2.35 yd ³)	5	1910 mm (75.2")	2030 mm (79.9")
		◆1.44 m ³ (1.88 yd ³)	1.25 m ³ (1.63 yd ³)	5	1470 mm (57.9")	-
		◎1.44 m ³ (1.88 yd ³)	1.25 m ³ (1.63 yd ³)	5	1470 mm (57.9")	-
		◎1.73 m ³ (2.26 yd ³)	1.5 m ³ (1.96 yd ³)	5	1710 mm (67.3")	-

◆ : Heavy duty bucket

◎ : Rock bucket (esco type)

9. RECOMMENDED OILS

Use only oils listed below. Do not mix different brand oil.

Please use HYUNDAI genuine oil and grease.

Service point	Kind of fluid	Capacity ℓ (U.S. gal)	Ambient temperature °C(°F)									
			-50 (-58)	-30 (-22)	-20 (-4)	-10 (14)	0 (32)	10 (50)	20 (68)	30 (86)	40 (104)	
Engine oil pan	Engine oil	35 (9.2)	★SAE 5W-40									
							SAE 30					
			SAE 10W									
			SAE 10W-30									
			SAE 15W-40									
Swing drive	Gear oil	6.0 (1.6)	★SAE 75W-90									
Final drive		8.0×2 (2.1×2)	SAE 80W-90									
Hydraulic tank	Hydraulic oil	Tank: 190 (50) System: 330 (87)	★ISO VG 15									
			ISO VG 32									
			ISO VG 46									
			ISO VG 68									
Fuel tank	Diesel fuel	500 (132)	★ASTM D975 NO.1									
			ASTM D975 NO.2									
Fitting (grease nipple)	Grease	As required	★NLGI NO.1									
			NLGI NO.2									
Radiator (reservoir tank)	Mixture of antifreeze and soft water★ ¹	45 (12)	Ethylene glycol base permanent type (50 : 50)									
			★Ethylene glycol base permanent type (60 : 40)									

SAE : Society of Automotive Engineers

API : American Petroleum Institute

ISO : International Organization for Standardization

NLGI : National Lubricating Grease Institute

ASTM : American Society of Testing and Material

★ : Cold region

Russia, CIS, Mongolia

★¹ : Soft water

City water or distilled water