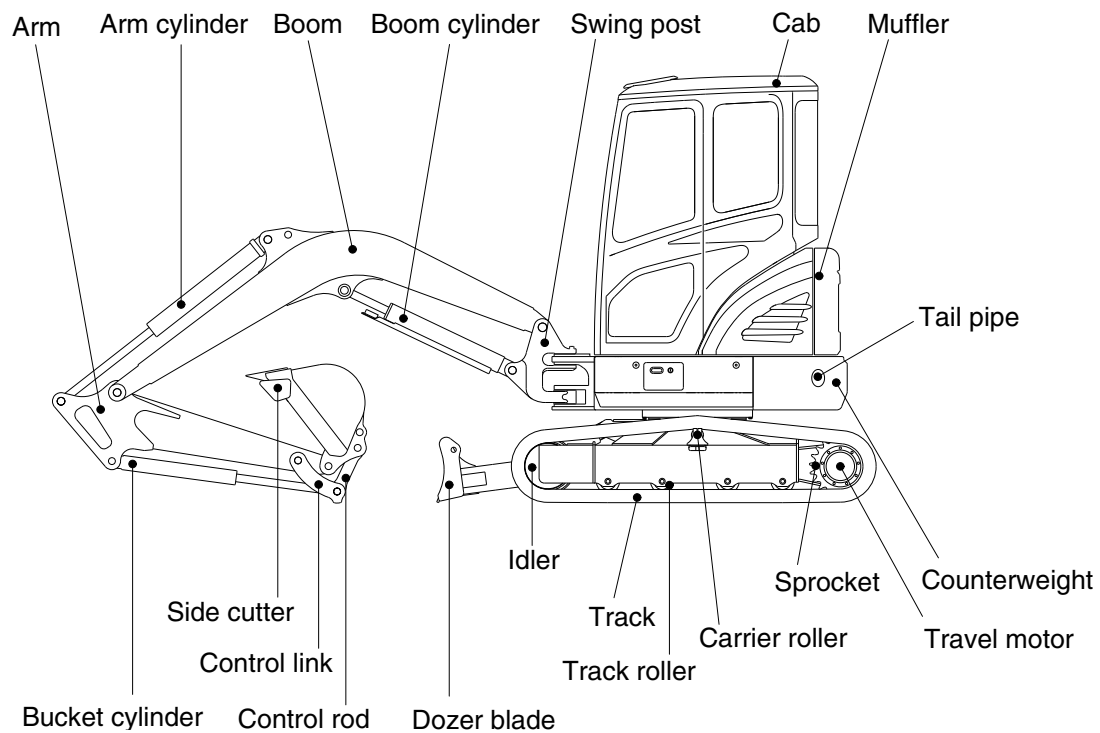
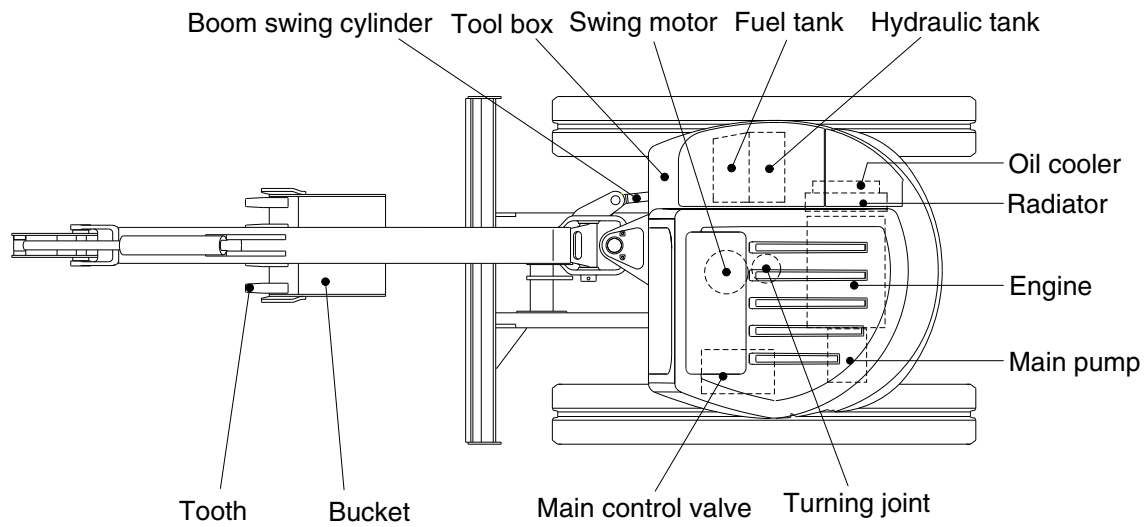


SPECIFICATIONS

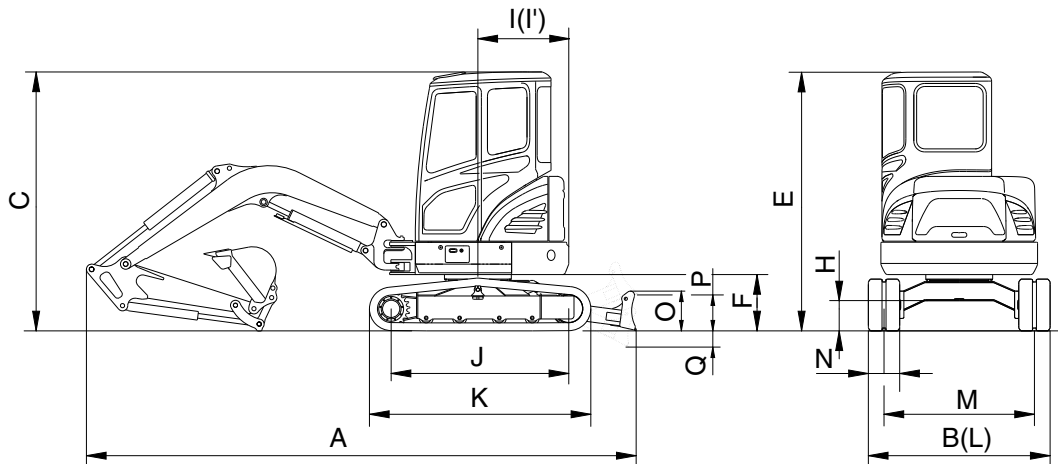
1. MAJOR COMPONENT



R35Z72SP01

2. SPECIFICATIONS

1) 2.5 m (8' 2") MONO BOOM, 1.3 m (4' 3") ARM, WITH BOOM SWING POST



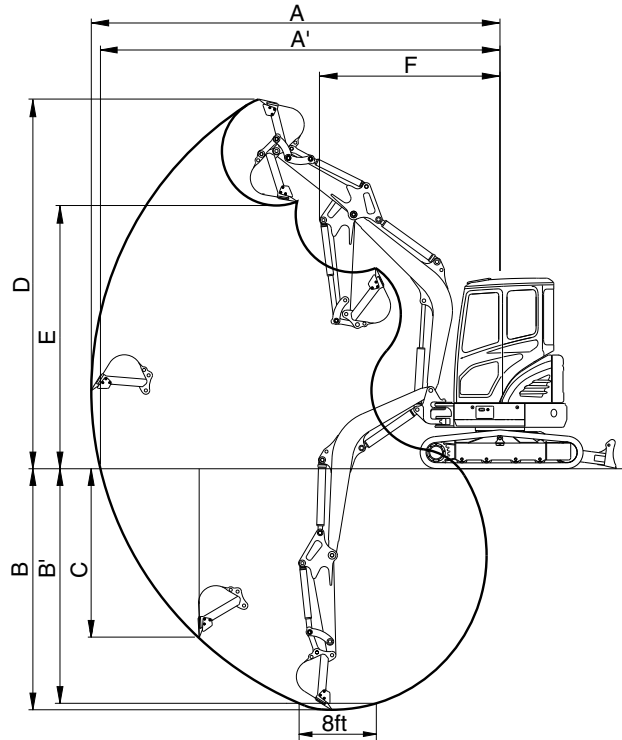
35Z9A2SP02

Description		Unit	Specification
Operating weight		kg (lb)	3690 (8140) / ★3785 (8340)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	0.11 (0.14)
Overall length	A	mm (ft-in)	4790 (15' 9")
Overall width, with 300 mm shoe	B		1740 (5' 9")
Overall height	C		2500 (8' 2")
Overall height of cab	E		2500 (8' 2")
Ground clearance of counterweight	F		540 (1' 9")
Minimum ground clearance	H		290 (0' 11")
Rear-end distance	I		870 (2' 10")
Rear-end swing radius	I'		870 (2' 10")
Distance between tumblers	J		1700 (5' 7")
Undercarriage length	K		2130 (7' 0")
Undercarriage width	L		1740 (5' 9")
Track gauge	M		1440 (4' 9")
Track shoe width, standard	N		300 (1' 0")
Height of blade	O		370 (1' 3") / ★405 (1' 4")
Ground clearance of blade up	P		375 (1' 3") / ★430 (1' 5")
Depth of blade down	Q		390 (1' 3") / ★440 (1' 5")
Travel speed (low/high)		km/hr (mph)	2.5/4.2 (1.6/2.6)
Swing speed		rpm	9.5
Gradeability		Degree (%)	30 (58)
Ground pressure (300 mm rubber track shoe)		kgf/cm ² (psi)	0.34 (4.83)
Max traction force		kg (lb)	3100 (6835)

★ : Angle dozer blade (25 degree left and right angle)

3. WORKING RANGE

1) 2.5 m (8' 2") MONO BOOM WITH BOOM SWING POST



35Z9A2SP03

Description		1.3 m (4' 3") Arm
Max digging reach	A	5315 mm (17' 5")
Max digging reach on ground	A'	5200 mm (17' 1")
Max digging depth	B	3135 mm (10' 3")
Max digging depth (8ft level)	B'	2670 mm (8' 9")
Max vertical wall digging depth	C	2190 mm (7' 2")
Max digging height	D	4810 mm (15' 9")
Max dumping height	E	3425 mm (11' 3")
Min swing radius	F	2350 mm (7' 9")
Boom swing radius (left/right)		75°/50°
Bucket digging force	SAE	27.4 kN
		2800 kgf
		6170 lbf
	ISO	30.7 kN
		3130 kgf
		6900 lbf
Arm crowd force	SAE	18.9 kN
		1930 kgf
		4250 lbf
	ISO	19.5 kN
		1990 kgf
		4390 lbf

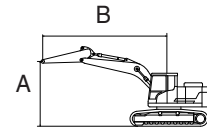
4. WEIGHT

Item	kg	lb
Upperstructure assembly	1975	4350
Main frame weld assembly	460	1010
Engine assembly	172	380
Main pump assembly	19	42
Main control valve assembly	25	55
Swing motor assembly	40	90
Hydraulic oil tank assembly	50	110
Fuel tank assembly	30	70
Boom swing post	80	180
Counterweight	410	900
Cab assembly	210	460
Canopy assembly	100	220
Lower chassis assembly	1230	2710
Track frame weld assembly	400	880
Swing bearing	50	110
Travel motor assembly	40	88
Turning joint	15	35
Track recoil spring	33.3	73
Idler	22.4	49
Carrier roller	7	15
Track roller	11.5	25
Sprocket	7	15
Rubber track (300 mm)	160	353
Dozer blade assembly	140	310
Front attachment assembly (2.5 m boom, 1.3 m arm, 0.11 m ³ SAE heaped bucket)	485	1070
2.5 m boom assembly	140	310
1.3 m arm assembly	80	180
0.11 m ³ SAE heaped bucket	87	191
Boom cylinder assembly	40	90
Arm cylinder assembly	40	90
Bucket cylinder assembly	30	70
Bucket control link assembly	20	45
Dozer cylinder assembly	30	70
Boom swing cylinder assembly	30	70

5. LIFTING CAPACITIES

Model	Type	Boom	Arm	Counterweight	Rubber shoe	Wheel	Dozer		Outrigger	
R35Z-9A	Cab	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		2500	1300	410	300	-	Up	-	-	-

 : Rating over-front
  : Rating over-side or 360 degree



Load point height (A)		Load radius (B)								At max. reach		
		1.0 m (3.3 ft)		2.0 m (6.6 ft)		3.0 m (9.8 ft)		4.0 m (13.1 ft)		Capacity		Reach
												m (ft)
4.0 m	kg									*670	*670	3.12
(13.1 ft)	lb									*1480	*1480	(10.2)
3.5 m	kg									*640	570	3.66
(11.5 ft)	lb									*1410	1260	(12.0)
3.0 m	kg							570	490	560	480	4.04
(9.8 ft)	lb							1260	1080	1230	1060	(13.3)
2.5 m	kg					*670	*670	560	490	500	430	4.30
(8.2 ft)	lb					*1480	*1480	1230	1080	1100	950	(14.1)
2.0 m	kg					*790	760	560	480	460	400	4.48
(6.6 ft)	lb					*1740	1680	1230	1060	1010	880	(14.7)
1.5 m	kg					850	730	540	470	440	380	4.58
(4.9 ft)	lb					1870	1610	1190	1040	970	840	(15.0)
1.0 m	kg					820	700	530	460	430	370	4.61
(3.3 ft)	lb					1810	1540	1170	1010	950	820	(15.1)
0.5 m	kg					800	680	520	450	430	370	4.57
(1.6 ft)	lb					1760	1500	1150	990	950	820	(15.0)
Ground	kg			*1260	1260	790	670	520	450	440	390	4.46
Line	lb			*2780	2780	1740	1480	1150	990	970	860	(14.6)
-0.5 m	kg			1540	1260	780	670	520	450	470	410	4.27
(-1.6 ft)	lb			3400	2780	1720	1480	1150	990	1040	900	(14.0)
-1.0 m	kg	*1930	*1930	1550	1270	780	670	520	450	520	450	4.00
(-3.3 ft)	lb	*4250	*4250	3420	2800	1720	1480	1150	990	1150	990	(13.1)
-1.5 m	kg	*2490	*2490	1570	1290	790	680			610	530	3.61
(-4.9 ft)	lb	*5490	*5490	3460	2840	1740	1500			1340	1170	(11.8)
-2.0 m	kg			*1210	*1210	*670	*670			*650	*650	3.03
(-6.6 ft)	lb			*2670	*2670	*1480	*1480			*1430	*1430	(9.9)

Note 1. Lifting capacity are based on 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 lift-point is bucket pivot mounting pin on the arm (without bucket mass).

4. *Indicates load limited by hydraulic capacity.

※ Lifting capacities are based upon a standard machine conditions.

Lifting capacities will vary with different work tools, ground conditions and attachments.

The difference between the weight of a work tool attachment must be subtracted.

Consult your Hyundai dealer regarding the lifting capacities for specific work tools and attachments.

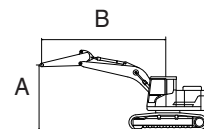
※ Please be aware of the local regulations and instructions for lifting operations.

▲ Failure to comply to the rated load can cause possible personal injury or property damage.

Make adjustments to the rated load as necessary for non-standard configurations.

Model	Type	Boom	Arm	Counterweight	Rubber shoe	Wheel	Dozer		Outtrigger	
R35Z-9A	Cab	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		2500	1300	410	300	-	Down	-	-	-

 : Rating over-front
 ·  : Rating over-side or 360 degree



Load point height (A)		Load radius (B)								At max. reach		
		1.0 m (3.3 ft)		2.0 m (6.6 ft)		3.0 m (9.8 ft)		4.0 m (13.1 ft)		Capacity		Reach
												m (ft)
4.0 m	kg									*670	*670	3.12
(13.1 ft)	lb									*1480	*1480	(10.2)
3.5 m	kg									*640	630	3.66
(11.5 ft)	lb									*1410	1390	(12.0)
3.0 m	kg							*620	550	*630	540	4.04
(9.8 ft)	lb							*1370	1210	*1390	1190	(13.3)
2.5 m	kg					*670	*670	*620	550	*630	480	4.30
(8.2 ft)	lb					*1480	*1480	*1370	1210	*1390	1060	(14.1)
2.0 m	kg					*790	*790	*650	540	*630	450	4.48
(6.6 ft)	lb					*1740	*1740	*1430	1190	*1390	990	(14.7)
1.5 m	kg					*930	810	*690	530	*640	430	4.58
(4.9 ft)	lb					*2050	1790	*1520	1170	*1410	950	(15.0)
1.0 m	kg					*1060	790	*740	520	*650	420	4.61
(3.3 ft)	lb					*2340	1740	*1630	1150	*1430	930	(15.1)
0.5 m	kg					*1150	770	*770	510	*660	420	4.57
(1.6 ft)	lb					*2540	1700	*1700	1120	*1460	930	(15.0)
Ground	kg			*1260	*1260	*1190	750	*790	500	*670	430	4.46
Line	lb			*2780	*2780	*2620	1650	*1740	1100	*1480	950	(14.6)
-0.5 m	kg			*1930	1430	*1170	750	*770	500	*680	460	4.27
(-1.6 ft)	lb			*4250	3150	*2580	1650	*1700	1100	*1500	1010	(14.0)
-1.0 m	kg	*1930	*1930	*1890	1440	*1110	750	*690	510	*690	510	4.00
(-3.3 ft)	lb	*4250	*4250	*4170	3170	*2450	1650	*1520	1120	*1520	1120	(13.1)
-1.5 m	kg	*2490	*2490	*1620	1460	*970	760			*690	590	3.61
(-4.9 ft)	lb	*5490	*5490	*3570	3220	*2140	1680			*1520	1300	(11.8)
-2.0 m	kg			*1210	*1210	*670	*670			*650	*650	3.03
(-6.6 ft)	lb			*2670	*2670	*1480	*1480			*1430	*1430	(9.9)

Note 1. Lifting capacity are based on ISO 10567.

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3. The lift-point is bucket pivot mounting pin on the arm (without bucket mass).

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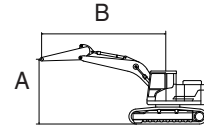
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Make adjustments to the rated load as necessary for non-standard configurations.

ANGLE DOZER BLADE

Model	Type	Boom	Arm	Counterweight	Rubber shoe	Wheel	Dozer		Outtriger	
R35Z-9A	Cab	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		2500	1300	410	300	-	Up	-	-	-

 : Rating over-front
  : Rating over-side or 360 degree



Load point height (A)		Load radius (B)								At max. reach		
		1.0 m (3.3 ft)		2.0 m (6.6 ft)		3.0 m (9.8 ft)		4.0 m (13.1 ft)		Capacity		Reach
												m (ft)
4.0 m (13.1 ft)	kg lb									*550 *1210	*550 *1210	3.18 (10.4)
3.5 m (11.5 ft)	kg lb									*530 *1170	*530 *1170	3.71 (12.2)
3.0 m (9.8 ft)	kg lb							500 1100	470 1040	480 1060	450 990	4.08 (13.4)
2.5 m (8.2 ft)	kg lb							500 1100	460 1010	430 950	400 880	4.34 (14.2)
2.0 m (6.6 ft)	kg lb					*680 *1500	*680 *1500	490 1080	460 1010	390 860	360 790	4.51 (14.8)
1.5 m (4.9 ft)	kg lb					780 1720	710 1570	480 1060	440 970	370 820	340 750	4.61 (15.1)
1.0 m (3.3 ft)	kg lb					740 1630	680 1500	470 1040	430 950	360 790	330 730	4.64 (15.2)
0.5 m (1.6 ft)	kg lb			*1050 *2310	*1050 *2310	720 1590	650 1430	450 990	420 930	360 790	330 730	4.60 (15.1)
Ground Line	kg lb			1400 3090	1230 2710	700 1540	640 1410	450 990	410 900	370 820	340 750	4.50 (14.8)
-0.5 m (-1.6 ft)	kg lb	*1560 *3440	*1560 *3440	1410 3110	1230 2710	690 1520	630 1390	440 970	410 900	390 860	370 820	4.31 (14.2)
-1.0 m (-3.3 ft)	kg lb	*1900 *4190	*1900 *4190	1420 3130	1240 2730	700 1540	630 1390	450 990	410 900	440 970	410 900	4.04 (13.3)
-1.5 m (-4.9 ft)	kg lb	*2320 *5110	*2320 *5110	1440 3170	1260 2780	710 1570	640 1410			520 1150	480 1060	3.66 (12.0)
-2.0 m (-6.6 ft)	kg lb			*1270 *2800	*1270 *2800	*710 *1570	660 1460			*670 *1480	630 1390	3.09 (10.2)

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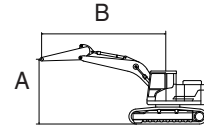
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Make adjustments to the rated load as necessary for non-standard configurations.

ANGLE DOZER BLADE

Model	Type	Boom	Arm	Counterweight	Rubber shoe	Wheel	Dozer		Outtriger	
R35Z-9A	Cab	Length [mm]	Length [mm]	weight [kg]	width [mm]	width [mm]	Front	Rear	Front	Rear
		2500	1300	410	300	-	Down	-	-	-

 : Rating over-front
  : Rating over-side or 360 degree



Load point height (A)		Load radius (B)								At max. reach		
		1.0 m (3.3 ft)		2.0 m (6.6 ft)		3.0 m (9.8 ft)		4.0 m (13.1 ft)		Capacity		Reach
												m (ft)
4.0 m (13.1 ft)	kg lb									*550 *1210	*550 *1210	3.18 (10.4)
3.5 m (11.5 ft)	kg lb									*530 *1170	*530 *1170	3.71 (12.2)
3.0 m (9.8 ft)	kg lb							*520 *1150	510 1120	*530 *1170	490 1080	4.08 (13.4)
2.5 m (8.2 ft)	kg lb							*530 *1170	500 1100	*530 *1170	430 950	4.34 (14.2)
2.0 m (6.6 ft)	kg lb					*680 *1500	*680 *1500	*560 *1230	490 1080	*540 *1190	400 880	4.51 (14.8)
1.5 m (4.9 ft)	kg lb					*820 *1810	770 1700	*610 *1340	480 1060	*550 *1210	380 840	4.61 (15.1)
1.0 m (3.3 ft)	kg lb					*960 *2120	740 1630	*660 *1460	470 1040	*570 *1260	370 820	4.64 (15.2)
0.5 m (1.6 ft)	kg lb			*1050 *2310	*1050 *2310	*1060 *2340	710 1570	*700 *1540	460 1010	*590 *1300	370 820	4.60 (15.1)
Ground Line	kg lb			*1520 *3350	1360 3000	*1110 *2450	700 1540	*720 *1590	450 990	*600 *1320	380 840	4.50 (14.8)
-0.5 m (-1.6 ft)	kg lb	*1560 *3440	*1560 *3440	*2050 *4520	1360 3000	*1110 *2450	690 1520	*710 *1570	450 990	*620 *1370	400 880	4.31 (14.2)
-1.0 m (-3.3 ft)	kg lb	*1900 *4190	*1900 *4190	*1880 *4140	1370 3020	*1060 *2340	690 1520	*660 *1460	450 990	*640 *1410	440 970	4.04 (13.3)
-1.5 m (-4.9 ft)	kg lb	*2320 *5110	*2320 *5110	*1640 *3620	1390 3060	*940 *2070	700 1540			*660 *1460	520 1150	3.66 (12.0)
-2.0 m (-6.6 ft)	kg lb			*1270 *2800	*1270 *2800	*710 *1570	*710 *1570			*670 *1480	*670 *1480	3.09 (10.2)

Note 1. Lifting capacity are based on ISO 10567.

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3. The lift-point is bucket pivot mounting pin on the arm (without bucket mass).

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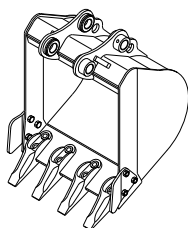
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Make adjustments to the rated load as necessary for non-standard configurations.

6. BUCKET SELECTION GUIDE



0.11 m³
SAE heaped bucket

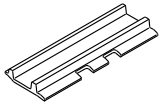
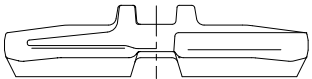
Capacity		Width		Weight	Recommendation
					2.5 m (8' 2") boom
SAE heaped	CECE heaped	Without side cutter	With side cutter		1.3 m (4' 3") arm
0.11 m ³ (0.14 yd ³)	0.09 m ³ (0.12 yd ³)	550 mm (21.7")	610 mm (24.0")	87 kg (191 lb)	Applicable for materials with density of 1600 kgf/m ³ (2700 lb /yd ³) or 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 double grousers.

(2) TYPES OF SHOES

Model	Shapes		Steel double grouser	Rubber track
				
R35Z-9A	Shoe width	mm (in)	300 (12")	300 (12")
	Operating weight	kg (lb)	3750 (8270)	3690 (8130)
	Ground pressure	kgf/cm ² (psi)	0.35 (4.98)	0.34 (4.83)
	Overall width	mm (ft-in)	1740 (5' 9")	1740 (5' 9")

(3) NUMBER OF ROLLERS AND SHOES ON EACH SIDE

Item	Quantity
Carrier rollers	1EA
Track rollers	4EA
Track shoes	44EA

8. SPECIFICATIONS FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Yanmar 3TNV88F-ESHYB
Type	4-cycle diesel engine, low emission
Cooling method	Water cooling
Number of cylinders and arrangement	3 cylinders, in-line
Firing order	1-3-2
Combustion chamber type	Direct injection type
Cylinder bore × stroke	88 × 90 mm (3.46" × 3.54")
Piston displacement	1642 cc (100.2 cu in)
Compression ratio	19.1 : 1
Rated gross horse power (SAE J1995)	24.4 Hp at 2200 rpm (18.2 kW at 2200 rpm)
Maximum torque at 1320 rpm	9.6 kgf · m (69.3 lbf · ft)
Engine oil quantity	6.7 l (1.8 U.S. gal)
Dry weight	172 kg (380 lb)
High idling speed	2350+30 rpm
Low idling speed	1200±30 rpm
Rated fuel consumption	177 g/Hp · hr at 2200 rpm
Starting motor	12V-2.3 kW
Alternator	12V-55 A
Battery	1 × 12 V × 70 Ah (20h rating)

2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 × 17 cc/rev
Maximum pressure	230 kgf/cm ² (3270 psi)
Rated oil flow	2 × 37.4 l/min (2 × 9.9 U.S. gpm / 2 × 8.2 U.K. gpm)
Rated speed	2200 rpm

3) GEAR PUMP

Item	Specification
Type	Fixed displacement gear pump single stage
Capacity	10.5/4.5 cc/rev
Maximum pressure	205/40 kgf/cm ² (2920/570 psi)
Rated oil flow	23.1/9.9 l /min (6.1/2.6 U.S. gpm / 5.1/2.2 U.K. gpm)

4) MAIN CONTROL VALVE

Item	Specification
Type	Sectional, 10 spools (11 Blocks)
Operating method	Hydraulic pilot system
Main relief valve pressure (P1,P2 / P3)	230 kgf/cm ² (3270 psi) / 205 kgf/cm ² (2920 psi)
Overload relief valve pressure	250 kgf/cm ² (3560 psi)

5) SWING MOTOR

Item	Specification
Type	Fixed displacement axial piston motor
Capacity	22 cc/rev
Relief pressure	200 kgf/cm ² (2845 psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	9.2 kgf · m (66.5 lbf · ft)
Brake release pressure	20~65 kgf/cm ² (284~925 psi)
Reduction gear type	2 - stage planetary

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement axial piston motor
Relief pressure	230 kgf/cm ² (3270 psi)
Reduction gear type	2-stage planetary
Braking system	Automatic, spring applied hydraulic released
Brake release pressure	12.2 kgf/cm ² (174 psi)
Braking torque	3.9 kgf · m (28 lbf · ft)

7) REMOTE CONTROL VALVE

Item		Specification
Type		Pressure reducing type
Operating pressure	Minimum	5 kgf/cm ² (71 psi)
	Maximum	20.5 kgf/cm ² (292 psi)
Single operation stroke	Lever	6.5/8.5 mm (0.26/0.33 in)

8) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Rod dia × Stroke	Ø85 × Ø45 × 540 mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	Ø80 × Ø45 × 585 mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	Ø70 × Ø45 × 510 mm
	Cushion	-
Boom swing cylinder	Bore dia × Rod dia × Stroke	Ø80 × Ø45 × 400 mm
	Cushion	-
Dozer cylinder	Bore dia × Rod dia × Stroke	Ø95 × Ø50 × 152 mm
	Cushion	-

※ 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) BUCKET

Item	Capacity		Tooth quantity	Width	
	SAE heaped	CECE heaped		Without side cutter	With side cutter
STD	0.11 m ³ (0.14 yd ³)	0.09 m ³ (0.12 yd ³)	4	550 mm (21.7")	610 mm (24.0")

9. RECOMMENDED OILS

Use only oils listed below or equivalent.

Do not mix different brand oil.

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	6.7 (1.8)	★SAE 5W-40								
						SAE 30					
			SAE 10W								
			SAE 10W-30								
									SAE 15W-40		
Final drive	Gear oil	0.5×2 (0.13×2)	★SAE 75W-90								
						SAE 85W-140					
Hydraulic tank	Hydraulic oil	Tank: 37 (9.8) System: 60 (15.9)	★ISO VG 15								
						ISO VG 46					
						ISO VG 68					
Fuel tank	Diesel fuel★ ¹	40 (10.5)	★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★ ²	5.5 (1.5)	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 : Ultra low sulfur diesel

- sulfur content ≤ 15 ppm

★² : Soft water

City water or distilled water