WSM

WORKSHOP MANUAL
KUBOTA EXCAVATOR

KX61-3, KX71-3

Mechanism Chapter

Kubota

Code No.97899-61040

Record of Revisions

Symbol	Date	Main Revised Points & Corrective Measures	Person-in-charge
△1			
△2			
△3			
△4			

KX61-3 EU and KX71-3 EU are for EU(European) - version.
KX71-3 PP is for KTC, KCL and KTA - version.

CONTENTS

I. General M-I-3

I. General

a. Sales feature

Product concept : Comfort in conpact

(1) Grade up the basic performance; Digging, filling back and lifting capacity
(2) Grade up product feature to differentiate competitor; Digital meter, hose protection

Workability	Bucket digging force improvement
	Variable pump adoption
	Boom and SP simultaneous operation
	The maximum digging depth priority
	High level stability
Maintenance	Blade hose division
	New digital meter adoption
Amenity	Much easier access into cabin
	Cabin width expansion
Operativity	Straight travel adoption
	Smoother operation
Safety	Engine safety start
	Travel lock system
	ROPS, FOPS standard equipment

b. Difference between KX61-3 and KX71-3

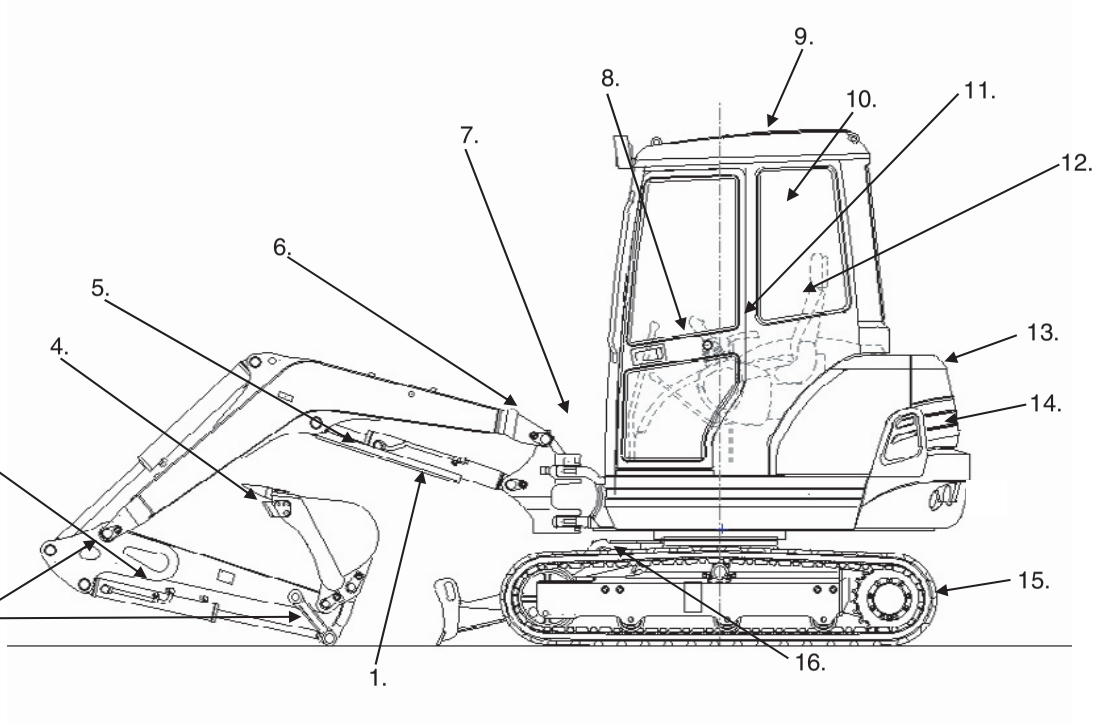
	Differentiation	KX61-3	KX71-3	Remark
No1.	Engine	V1505 (24.8 PS)	V1505 (27.5PS)	
No2.	Bucket digging forth	2190 kgf	2570 kgf	Bucket cylinder is different
No3.	Working area (Arm length)	1300 mm	1350 mm	Boom is different
No4.	New digital meter	Equipped	Equipped	
No5.	Variable track specification	Not adopted	Not adopted	
No6.	Travel speed	Two speed	Two speed	
No7.	Straight travel	Equipped	Equipped	
No8.	Seat grade	High back seat	High back seat	
No9.	Roof window of the cabin	Not equipped	Not equipped	

c. Quick chart for selling points : KX61-3, KX71-3

Short stroke operating lever and wrist rest

Digital panel with new navigation system

High speed travel switch on the dozer lever



Best matching of variable displacement hydraulic pump and Kubota new diesel engine

V1505, 24.8HP 2100rpm (KX61-3)
V1505, 27.5HP 2300rpm (KX71-3)

1. Reinforced boom cylinder protector
2. Iron bush
3. Bucket cylinder hoses are inside.
4. Bucket breakeout force is No.1 in the class.
5. Upgraded lifting capasity
6. Front hose cover for clear view
7. Front hoses go inside the swing bracket.
8. Travel safety lock system
9. Rops / Fops
10. Low noise level
11. Wrist rest control lever
12. New digital panel (Kubota I.C.S)
13. Double full open bonnet
14. 4-cylinder engine
15. Reinforced rubber track
16. Separate-type dozer cylinder hose

d. Comparison to competitors;EU - version

A:Advantage, B:Equal

■ , ☐ : Salers points

	Advantage		VS Current model		Items	Standard type (2.5 ~ 2.8t class)					Standard type (2.8 ~ 3.0t class)				
			New	Conti-nued		KX61-3	KX61-2α	B25V	Neuson 2503	Bobcat 325	KX71-3	KX71-2α	Takeuchi TB125	Bobcat 328	VOLVO EC25
Workability	A	■	★		Big displacement, 4 cylinder engine	4	3	3	3	3	4	4	3	3	3
			★		Variable displacement pump, large discharge	V2	V2	V2	V2	V2	V2	G	V2	V2	V1
		■	★		Lifting capacity (KN)	4.9	4.3	4.2	3.5	*	5.5	4.2	3.9	3.0	4.3
		■	★		Bucket digging force (KN) upgraded, reinforced arm	21.5	21.5	20.0	19.3	21.2	25.2	24.6	20.6	21.2	21.8
				★	Large working space (Long arm)	○	○	×	×	×	○	○	○	×	○
	B		★		Swivel motor negative brake	○	×	○	○	×	○	×	○	×	○
			★		Standard third line	○	×	○	○	○	○	×	○	○	×
Durability	A	☐	★		Front hoses in the swing bracket	○	×	×	×	△	○	×	×	△	×
			★		Rugged boom cylinder protector	○	×	×	×	×	○	×	×	×	×
		☐		★	Swing bracket bush	○	×	○	×	×	○	×	×	×	×
	B			★	Bucket cylinder hose inside	○	○	×	○	×	○	○	○	×	×
				★	Rugged rubber track (300 mm)	○	×	○	×	○	○	×	○	○	○
			★		Line filter in the pilot system	○	×	*	*	*	○	×	*	*	*
Maintenance	A	■	★		Double full open bonnet	○	×	△	○	△	○	×	△	△	○
				★	Separate-type dozer cylinder hose	○	○	○	×	○	○	○	×	○	×
	B		★		upper roller	○	×	○	○	×	○	×	○	×	○
				★	Tool box	○	×	*	*	*	○	○	*	*	*
				★	Track frame shape	One angle	Angle	Flat	Angle	Flat	One angle	Angle	Angle	Flat	Angle
Comfortability	A	■	★		New digital panel	○	×	×	×	×	○	×	×	×	×
	B			★	Noise level at ear (dBA)	78	79	78	74	80	78	79	77	80	80
Operability	A		★		Auto glow, easy start	○	×	*	*	*	○	×	*	*	*
	B		★		Wrist rest control	○	×	○	×	○	○	×	○	○	○
				★	Smooth control fuling	○	○	○	×	×	○	○	○	×	○
		☐	★		Large fuel tank	○ 45	28	29	41	53.3	× 45	63	51	53.3	49
Safety	A	☐	★		Rops/Fops cab, 4P canopy	○	Tops/Fops	○ (OP)	○	Rops/	○	Tops/Fops	Tops/Fops	Rops/	○
			★		Front hose cover	○	×	×	×	×	○	×	×	×	×
	B			★	Stability (Front, KN)	4.1	3.2	4.8	4.1	3.5	4.4	4.1	3.9	4.0	3.7
		☐	★		Travel safety lock	○	×	○	○	○	○	×	○	○	○

e. Compornents compatibility

⦿ Parent	● 100% compatible	◕ high compatible	◑	◔ low compatible	○ Original design

No.	Components		U20-3	U25-3	KX71-3(PP)	KX61-3(EU)	KX71-3(EU)	Remark
1	Track frame		○	⦿	◑	⦿	◑	
2	Front idler		○	⦿	●	●	●	
3	Track tension		◔	⦿	●	●	●	
4	Track roller		○	⦿	●	●	●	
5	Upper roller		●	⦿	●	●	●	KX91-3
6	Track shoe		○	⦿	●	●	●	W=300mm, 80 links
7	Swivel bearing		○	⦿	●	⦿	●	Different maker
8	Seat		●	⦿	◑	⦿	●	Full suspension seat
9	Swivel frame		◔	⦿	◑	⦿	●	
10	Engine mount		●	⦿	●	⦿	●	V1505
11	Pump mount		●	⦿	●	⦿	●	Different coupling maker
12	Bonnet		●	⦿	●	⦿	●	Different maker
13	Control box cover		●	⦿	⦿	●	●	
14	Canopy		●	⦿	●	⦿	●	≒ KX71-3
15	Cab		●	⦿	●	⦿	●	≒ KX71-3
16	Weight		◑	⦿	◑	⦿	⦿	
17	Fuel tank		●	⦿	●	⦿	●	Different maker
18	Electricl components	Starter	●	⦿	●	●	●	
		Alternater	●	⦿	⦿	●	●	
		Meter	●	⦿	⦿	●	●	
19	Label		◕	⦿	⦿	⦿	◕	
20	Hydro pump		◑	⦿	●	⦿	●	Fujikoshi
21	Control valve		◑	⦿	◑	⦿	◑	NA: Nabuco, EU: Hidra control
22	Swivel motor		◑	⦿	●	⦿	◑	
23	Travel motor		⦿	⦿	◑	⦿	⦿	EU: Transmittel & Kayaba NA: Kubota Seiki
24	Oil tank		●	⦿	●	⦿	●	
25	Swivel joint		●	⦿	●	⦿	●	
26	Pilot valve		●	⦿	◑	⦿	●	EU: Joystick type NA = KX121-3
27	Swing bracket		●	⦿	◕	⦿	●	
28	Boom		◑	⦿	◑	⦿	◔	
29	Arm		◑	⦿	⦿	⦿	◔	
30	Bucket link		●	⦿	⦿	⦿	◑	
31	Bucket		◕	⦿	⦿	⦿	◑	NA = KX91-3
32	Dozer blade		◕	⦿	●	⦿	◑	Different maker
33	Swing cyl.		●	⦿	◑	●	⦿	Different maker
34	Boom cyl.		○	⦿	◑	⦿	⦿	Different maker
35	Arm cyl.		◕	⦿	⦿	⦿	⦿	Different maker
36	Bucket cyl.		○	⦿	⦿	⦿	⦿	Different maker
37	Dozer cyl.		○	⦿	◑	⦿	⦿	Different maker

f. Machine specifications

		Unit	KX61-3 EU	KX71-3 EU	KX71-3 PP
Engine					
Type			Vertical, water-cooled 4 cycle, 4 cylinders diesel		
Model			V1505-E2-BH-9-EU	V1505-E2-BH-10-EU	V1505-E2-BH-10
Output power (ISO 3406m Gross)		kW PS	18.3 kW/2100rpm 24.9 PS/2100rpm	20.6 kW/2300rpm 28.0 PS/2300rpm	← (SAE-J1349)
Displacement		cc	1498	1498	←
Dimensions					
Overall length STD/Long		mm (in)	4270 / 4310	4520 / 4550	4550 (179.1)
Overall width		mm (in)	1400	1500	← (59.1)
Overall crawler width		mm (in)	1400	1500	← (59.1)
Overall height	Canopy	mm (in)	2430	2430	← (95.7)
	Cabin	mm (in)	2410	2410	← (94.9
Min. ground clearance		mm (in)	305	←	← (12.0)
Max. digging depth	STD. Arm	mm (in)	2490	2680	—
	Long Arm	mm (in)	2740	2870	2970 (116.9)
Max. digging height	STD. Arm	mm (in)	4360	4470	—
	Long Arm	mm (in)	4540	4600	4700 (185.0)
Max. digging radius	STD. Arm	mm (in)	4480	4700	—
	Long Arm	mm (in)	4720	4890	4990 (196.5)
Max. dumping height	STD. Arm	mm (in)	3060	3170	—
	Long Arm	mm (in)	3240	3300	3180 (125.2)
Swing angle (left/right)		deg	78 / 57	←	←
Travel speed	Low speed R/I	km/h (m/h)	2.8 / 2.7	2.7 / 2.6	2.6 (1.6) / 2.6 (1.6)
	High speed R/I	km/h (m/h)	4.4 / 4.3	4.6 / 4.5	4.5 (2.8) / 4.4 (2.7)
Swing speed		rpm	9.5	9.4	←
Max. traction force	Low speed	kN (kgf) lbw	20.2 (2060)	22.3 (2275)	22.1 (2250) 4960
	High speed	kN (kgf) lbw	11.7 (1193)	14.6 (1490)	11.1 (1130) 2491
Performance					
Tumbler distance		mm (in)	1560	←	← (61.4)
Tread		mm (in)	1100	1200	← (47.2)
Crawler width × No. of shoe × pitch Rubber		mm (in)	300 × 53 × 80	←	←
Bucket					
Capacity CECE heaped		m^3 (yd^3)	0.06	0.07	0.08 (0.06)
Width		mm (in)	450	480	450 (17.7)
Dozer					
Width × height		mm (in)	1400 × 300	1500 × 300	← (59.1 × 11.8)
Lift above GL / below GL		mm (in)	350 × 310	370 × 350	340 × 300 (13.4 × 12.2)

Note:Kubota Japan Bucket

g. Machine weight

kgf
(lbs)

	Track	Arm	KX61-3 EU	KX71-3 EU	KX71-3 PP
Canopy	Rubber	STD	2530 (5566)	2720 (5984)	—
		Long	2540 (5588)	2730 (6006)	2780 (6116)
	Iron	STD	2625 (5775)	2815 (6193)	—
		Long	2630 (5786)	2825 (6215)	2875 (6325)
Cab	Rubber	STD	2640 (5808)	2830 (6226)	—
		Long	2650 (5830)	2840 (6248(	2890 (6358)
	Iron	STD	2735 (6017)	2925 (6435)	—
		Long	2745 (6039)	2935 (6457)	2985 (6567)
Cab (Light weight)	Rubber	STD	2580 (5676(	—	—
		Long	2590 (5698)	—	—
	Iron	STD	2675 (5885)	—	—
		Long	2685 (5907)	—	—

(Note : Cab - canopy = 105 kgf, Iron track - rubbertrack = 95 kgf, Long arm - STD arm = 10 kgf)

h. Quality specifications

Machine specifications : Service port, Wrist rest, STD and Long arm, FM-cab or canopy, KBM & KBT bucket

No		Specificatios Items			Unit	KX61-3 EU		KX71-3 EU		KX71-3 PP		Remarks
						Std value	Allowable range	Std value	Allowable range	Std value	Allowable range	
Q1		**Main Specs. JIS A8404**										
1	1	Machine size	Total length (Transport)		mm	4270.0	4185.0 to 4355.0	4520.0	4430.0 to 4610.0	4550.0	4459.0 to 4641.0	
					inch	168.1	164.8 to 171.5	178.0	174.4 to 181.5	179.1	175.6 to 182.7	
	2			(Long)	mm	4310.0	4224.0 to 4396.0	4550.0	4459.0 to 4641.0	-	-	
					inch	169.7	166.3 to 173.1	179.1	175.6 to 182.7	-	-	
	3		Total width		mm	1400.0	1386.0 to 1414.0	1500.0	1485.0 to 1515.0	←	←	
					inch	55.1	54.6 to 55.7	59.1	58.5 to 59.6	←	←	
	4		Total height (Canopy)		mm	2430.0	2406.0 to 2545.0	←	←	←	←	
					inch	95.7	94.7 to 100.2	←	←	←	←	
	5		Total height (Cabin)		mm	2410.0	2386.0 to 2434.0	←	←	←	←	
					inch	94.9	93.9 to 95.8	←	←	←	←	
2	1	Weight	Machine weight (Canopy)		kg	2540.0	2515.0 to 2565.0	2730.0	2703.0 to 2757.0	2780.0	2724.0 to 2836.0	Fuel tank,full, lub. oil and water are specified amount.
					lbs	5599.7	5544.6 to 5654.8	6018.6	5959.0 to 6078.1	6128.8	6005.3 to 6252.2	
	2		Machine weight (Cabin)		kg	2650.0	2624.0 to 2677.0	2840.0	2812.0 to 2868.0	2890.0	2832.0 to 2948.0	
					lbs	5842.2	5784.9 to 5901.7	6261.1	6199.3 to 6322.8	6371.3	6243.4 to 6499.2	
	3		Machine weight (Light duty cab)		kg	2580.0	2554.0 to 2606.0	-	-	-	-	
					lbs	5687.9	5630.5 to 5745.2	-	-	-	-	
3	1	Performance	Swivel speed	L	rpm	9.5	8.6 to 10.5	9.4	8.5 to 10.3	←	←	
	2			R	rpm	9.5	8.6 to 10.5	9.4	8.5 to 10.3	←	←	
	3		Travel speed	Rubber F1	km/h	2.8	2.5 to 3.1	2.7	2.4 to 3.0	2.6	2.3 to 2.9	
					mph	1.7	1.6 to 1.9	1.7	1.5 to 1.9	1.6	1.4 to 1.8	
	4			Rubber F2	km/h	4.4	4.0 to 4.8	4.6	4.1 to 5.1	4.5	4.1 to 5.0	
					mph	2.7	2.5 to 3.0	2.9	2.5 to 3.2	2.8	2.5 to 3.1	
	5			Iron F1	km/h	2.7	2.4 to 3.0	2.6	2.3 to 2.9	←	←	
					mph	1.7	1.5 to 1.9	1.6	1.4 to 1.8	←	←	
	6			Iron F2	km/h	4.3	3.9 to 4.7	4.5	4.1 to 5.0	4.4	4.0 to 4.8	
					mph	2.7	2.4 to 2.9	2.8	2.5 to 3.1	2.7	2.5 to 3.0	
	7		Gradeability		deg	30.0	30.0 <	←	←	←	←	

No		Specificatios Items			Unit	KX61-3 EU		KX71-3 EU		KX71-3 PP		Remarks
						Std value	Allowable range	Std value	Allowable range	Std value	Allowable range	
4	1	Rear end min. turning radius			mm	1160.0	1137.0 to 1183.0	1200.0	1176.0 to 1224.0	←	←	
					inch	45.7	44.8 to 46.6	47.2	46.3 to 48.2	←	←	
	2	Swivel frame rear ground clearance			mm	530.0	519.0 to 541.0	←	←	←	←	
					inch	20.9	20.4 to 21.3	←	←	←	←	
	3	Tambler center distance			mm	1560.0	1513.0 to 1607.0	←	←	←	←	
					inch	61.4	59.6 to 63.3	←	←	←	←	
	4	Crawler total length			mm	1990.0	1930.0 to 2050.0	←	←	←	←	
					inch	78.3	76.0 to 80.7	←	←	←	←	
	5	Crawler total width			mm	1400.0	1920.0 to 2000.0	1500.0	1920.0 to 2000.0	←	←	
					inch	55.1	75.6 to 78.7	59.1	75.6 78.7	←	←	
	6	Min. ground clearance			mm	305.0	296.0 to 314.0	←	←	←	←	
					inch	12.0	11.7 to 12.4	←	←	←	←	
5	1	Front attachment	Bucket heaped capacity	CECE	m3	0.040	0.038 to 0.042	0.050	0.048 to 0.052	0.060	0.058 to 0.062	
					yd3	0.052	0.050 to 0.055	0.065	0.063 to 0.068	0.078	0.076 to 0.081	
	2			SAE, JIS	m3	0.060	0.058 to 0.062	0.070	0.067 to 0.073	0.080	0.077 to 0.083	
					yd3	0.078	0.076 to 0.081	0.092	0.088 to 0.095	0.105	0.101 to 0.109	
	3		Bucket width		mm	450.0	540.0 to 560.0	480.0	540.0 to 560.0	450.0	540.0 to 560.0	Without side cutter
					inch	17.7	21.3 to 22.0	18.9	21.3 to 22.0	17.7	21.3 to 22.0	
	4		Swing angle	L	deg	78.0	76.0 to 80.0	←	←	←	←	
	5			R	deg	57.0	55.0 to 59.0	←	←	56.0	54.0 to 58.0	
	8		Max. digging radius		mm	4480.0	4413.0 to 4547.0	4700.0	4630.0 to 4771.0	4990.0	4915.0 to 5065.0	
					inch	176.4	173.7 to 179.0	185.0	182.3 to 187.8	196.5	193.5 to 199.4	
				(Long)	mm	4720.0	4649.0 to 4791.0	4890.0	4817.0 to 4963.0	-	-	
					inch	185.8	183.0 to 188.6	192.5	189.6 to 195.4	-	-	
	9		Ground level Max. digging radius"		mm	4350.0	4285.0 to 4415.0	4580.0	4511.0 to 4649.0	4880.0	4807.0 to 4953.0	
					inch	171.3	168.7 to 173.8	180.3	177.6 to 183.0	192.1	189.3 to 195.0	
				(Long)	mm	4600.0	4531.0 to 4669.0	4770.0	4698.0 to 4842.0	-	-	
					inch	181.1	178.4 to 183.8	187.8	185.0 to 190.6	-	-	
	10		Ground level Min. finish radius"		mm	1520.0	1474.0 to 1566.0	1550.0	1504.0 to 1597.0	1430.0	1387.0 to 1473.0	Bucket bottom horizontal
					inch	59.8	58.0 to 61.7	61.0	59.2 to 62.9	56.3	54.6 to 58.0	
				(Long)	mm	1380.0	1339.0 to 1421.0	1430.0	1387.0 to 1473.0	-	-	
					inch	54.3	52.7 to 55.9	56.3	54.6 to 58.0	-	-	

No		Specificatios Items			Unit	KX61-3 EU		KX71-3 EU		KX71-3 PP		Remarks
						Std value	Allowable range	Std value	Allowable range	Std value	Allowable range	
5	11		Max. digging depth		mm	2490.0	2440.0 to 2540.0	2680.0	2626.0 to 2734.0	2970.0	2911.0 to 3029.0	
					inch	98.0	96.1 to 100.0	105.5	103.4 to 107.6	116.9	114.6 to 119.3	
				(Long)	mm	2740.0	2685.0 to 2795.0	2870.0	2813.0 to 2927.0	-	-	
					inch	107.9	105.7 to 110.0	113.0	110.7 to 115.2	-	-	
	12		Max. vertical digging depth		mm	2050.0	1989.0 to 2112.0	2260.0	2192.0 to 2328.0	1900.0	1843.0 to 1957.0	
					inch	80.7	78.3 to 83.1	89.0	86.3 to 91.7	74.8	72.6 to 77.0	
				(Long)	mm	2290.0	2221.0 to 2359.0	2460.0	2386.0 to 2534.0	650.0	631.0 to 670.0	
					inch	90.2	87.4 to 92.9	96.9	93.9 to 99.8	25.6	24.8 to 26.4	
	13		Max. digging height		mm	4360.0	4273.0 to 4447.0	4470.0	4381.0 to 4559.0	4700.0	4606.0 to 4794.0	
					inch	171.7	168.2 to 175.1	176.0	172.5 to 179.5	185.0	181.3 to 188.7	
	14			(Long)	mm	4540.0	4449.0 to 4631.0	4600.0	4508.0 to 4692.0	4580.0	4488.0 to 4672.0	
					inch	178.7	175.2 to 182.3	181.1	177.5 to 184.7	180.3	176.7 to 183.9	
	15		Max. dump height		mm	3060.0	2999.0 to 3121.0	3170.0	3107.0 to 3233.0	3180.0	3116.0 to 3244.0	
					inch	120.5	118.1 to 122.9	124.8	122.3 to 127.3	125.2	122.7 to 127.7	
	16			(Long)	mm	3240.0	3175.0 to 3305.0	3300.0	3234.0 to 3366.0	-	-	
					inch	127.6	125.0 to 130.1	129.9	127.3 to 132.5	-	-	
	17		Max. dump height (Arm vertical)		mm	1270.0	1232.0 to 1308.0	1280.0	1242.0 to 1318.0	1040.0	1009.0 to 1071.0	
					inch	50.0	48.5 to 51.5	50.4	48.9 to 51.9	40.9	39.7 to 42.2	
	18			(Long)	mm	1030.0	999.0 to 1061.0	1080.0	1048.0 to 1112.0	-	-	
					inch	40.6	39.3 to 41.8	42.5	41.3 to 43.8	-	-	
	19	Mini. turning radius	Front straight		mm	1830.0	1775.0 to 1885.0	1840.0	1785.0 to 1895.0	1940.0	1882.0 to 1998.0	
					inch	72.0	69.9 to 74.2	72.4	70.3 to 74.6	76.4	74.1 to 78.7	
	20			(Long)	mm	1880.0	1824.0 to 1936.0	1870.0	1814.0 to 1926.0	-	-	
					inch	74.0	71.8 to 76.2	73.6	71.4 to 75.8	-	-	
	21		Full swing position		mm	1430.0	1387.0 to 1473.0	1440.0	1397.0 to 1483.0	1580.0	1533.0 to 1627.0	
					inch	56.3	54.6 to 58.0	56.7	55.0 to 58.4	62.2	60.4 to 64.1	
	22			(Long)	mm	1480.0	1436.0 to 1524.0	1490.0	1445.0 to 1535.0	-	-	
					inch	58.3	56.5 to 60.0	58.7	56.9 to 60.4	-	-	
6	1	Dozer	Width		mm	1400.0	1395.0 to 1405.0	1500.0	1495.0 to 1505.0	←	←	
					inch	55.1	54.9 to 55.3	59.1	58.9 to 59.3	←	←	
	2		Height		mm	300.0	290.0 to 310.0	←	←	←	←	
					inch	11.8	11.4 to 12.2	←	←	←	←	

No		Specificatios Items			Unit	KX61-3 EU		KX71-3 EU		KX71-3 PP		Remarks
						Std value	Allowable range	Std value	Allowable range	Std value	Allowable range	
6	3		Max. lift above GL		mm	350.0	300.0 to 400.0	370.0	320.0 to 420.0	340.0	290.0 to 390.0	
					inch	13.8	11.8 to 15.7	14.6	12.6 16.5	13.4	11.4 15.4	
	4		Max. below GL		mm	310.0	260.0 to 360.0	350.0	300.0 to 400.0	310.0	260.0 to 360.0	
					inch	12.2	10.2 to 14.2	13.8	11.8 15.7	12.2	10.2 14.2	
Q2		**Main Specs JIS A8404**										
1	1	Bucket tooth slaggish			mm	60.0	73.0 >	←	←	←	←	Pushing force;30kgf
					inch	2.4	2.9 >	←	←	←	←	
	2	Front boom declination			mm	0.0	10.0 >	←	←	←	←	
					inch	0.0	0.4 >	←	←	←	←	
	3	Dozer's declination			mm	3.0	10.0 >	←	←	←	←	
					inch	0.1	0.4 >	←	←	←	←	
2	1	Distance to teeth from boom cylinder			mm	45.0	41.0 to 50.0	35.0	32.0 to 39.0	40.0	36.0 to 44.0	
					inch	1.8	1.6 to 2.0	1.4	1.3 to 1.5	1.6	1.4 to 1.7	
3	1	Approach angle			deg	35.0	32.0 to 39.0	31.5	28.0 to 35.0	30.0	27.0 to 33.0	
4	1	Crawler height			mm	430.0	421.0 to 439.0	←	←	←	←	Include grouser on the spocket
					inch	16.9	16.6 to	←	←	←	←	
	2	Max. crawler height			mm	445.0	436.0 to 454.0	←	←	465.0	456.0 to 474.0	
					inch	17.5	17.2 to 17.9	←	←	18.3	18.0 to 18.7	
Q3		**Engine performance**										
1	1	Max. engine rpm	no load		rpm	2300.0	2300.0 >	2500.0	2500.0 >	←	←	
	2		1 pump relief		rpm	-	-	-	-	-	-	
	3		2 pump relief		rpm	-	-	-	-	-	-	
	4		3 pump relief		rpm	-	-	-	-	-	-	Boom, arm, swivel
	5		2 pump relief		rpm	2100.0	2000.0 <	2300.0	2200.0 <	←	←	
	6		Dozer+2 pump relief		rpm	2100.0	2000.0 <	2300.0	2200.0 <	←	←	
2	1	Idler			rpm	1100.0	1050.0 to 1150.0			←	←	Cab:1500rpm
Q4		**Travelling performance**										
1	1	Travel motor block performance	L		mm	270.0	300.0 >	280.0	300.0 >	←	←	On the 20 deg. slope, 10 min, engine stop condition, travel stance, oil temp. 50degree centi.
					inch	10.6	11.8 >	11.0	11.8 >	←	←	
	2		R		mm	270.0	300.0 >	280.0	300.0 >	←	←	
					inch	10.6	11.8 >	11.0	11.8 >	←	←	

No		Specificatios Items			Unit	KX61-3 EU		KX71-3 EU		KX71-3 PP		Remarks
						Std value	Allowable range	Std value	Allowable range	Std value	Allowable range	
2	1	Max. Traction force	F1		kgf	2060.4	1856.4 <	2274.6	2050.2 <	2254.2	2029.8 <	Oil temp. 50 degree centi., travel stance, F1:slip, 70% of absolute traction force, F2:Relief, 60 % of absolute traction force
					kN	20.2	18.2 <	22.3	20.1 <	22.1	19.9 <	
					lbw	4542.4	4092.7 <	5014.6	4519.9 <	4969.7	4474.9 <	
	2		F2		kgf	1193.4	1071.0 <	1489.2	1336.2 <	1132.2	1020.0 <	
					kN	11.7	10.5 <	14.6	13.1 <	11.1	10.0 <	
					lbw	2631.0	2361.1 <	3283.1	2945.8 <	2496.1	2248.7 <	
3	1	Travel straightness	F1		mm	600.0	600.0 >	←	←	←	←	10m distance, engine max.speed, oil temp.50 degree centi.
					inch	23.6	23.6 >	←	←	←	←	
	2		F2		mm	600.0	600.0 >	←	←	←	←	
					inch	23.6	23.6 >	←	←	←	←	
	3		Dozer F1		mm	600.0	600.0 >	←	←	←	←	Dozer up & down 10m distance
					inch	23.6	23.6 >	←	←	←	←	
	4		Dozer R1		mm	600.0	600.0 >	←	←	←	←	
					inch	23.6	23.6 >	←	←	←	←	
4	1	Track shoe sag distance	Iron		mm	75.0	75.0 to 80.0	←	←	←	←	
					inch	3.0	3.0 to 3.1	←	←	←	←	
	2		Rubber		mm	10.0	10.0 to 15.0	←	←	←	←	
					inch	0.4	0.4 to 0.6	←	←	←	←	
Q5		**Work performance**										
1	1	Boom lifting capacity			kgf	499.8	448.8 <	489.6	438.6 <	360.0	326.4 <	Front end, Arm extend bucket crowd, at tooth
					kN	4.9	4.4 <	4.8	4.3 <	3.5	3.2 <	
					lbw	1101.9	989.4 <	1079.4	966.9 <	793.7	719.6 <	
	2	Arm digging force			kgf	1499.4	1428.0 <	1795.2	1703.4 <	1485.0	1407.6 <	Bucket tooth root
					kN	14.7	14.0 <	17.6	16.7 <	14.6	13.8 <	
					lbw	3305.6	3148.2 <	3957.7	3755.3 <	3273.9	3103.2 <	
	3			(Long)	kgf	1264.8	1203.6 <	1652.4	1570.8 <	-	-	Machine stance to JIS bucket tooth root
					kN	12.4	11.8 <	16.2	15.4 <	-	-	
					lbw	2788.4	2653.5 <	3642.9	3463.0 <	-	-	
	4	Bucket digging force		Crowd	kgf	2193.0	2080.8 <	2570.4	2437.8 <	2160.0	2050.2 <	
					kN	21.5	20.4 <	25.2	23.9 <	21.2	20.1 <	
					lbw	4834.7	4587.4 <	5666.8	5374.4 <	4762.0	4519.9 <	

No		Specificatios Items			Unit	KX61-3 EU		KX71-3 EU		KX71-3 PP		Remarks
						Std value	Allowable range	Std value	Allowable range	Std value	Allowable range	
1	5			Power hole	kgf	-	-	-	-	2880.0	2754.0 <	
					kN	-	-	-	-	28.4	27.0 <	
					lbw	-	-	-	-	6349.3	6071.5 <	
	6	Dozer force		down	kgf	1723.8	1642.2 <	2130.0	2019.6 <	←	←	Cutting edge down force at ground level
					kN	16.9	16.1 <	20.9	19.8 <	←	←	
					lbw	3800.3	3620.4 <	4695.8	4452.5 <	←	←	
2	1	Boom speed	Canopy	up 1st	sec	2.6	2.3 to 2.9	2.4	2.1 to 2.7	←	←	Oil temp. 50±5°C(122±41°F) Ground to max. height (exculude cushioning)
	2			up 2nd	sec	4.2	3.9 to 4.5	4.3	4.0 to 4.6	4.0	3.7 to 4.3	
	3			down	sec	2.6	2.3 to 2.9	2.3	2.0 to 2.6	2.4	2.1 to 2.7	
	4			down	sec	4.0	3.7 to 4.3	3.9	3.6 to 4.2	3.8	3.5 to 4.1	
3	1	Arm speed		crowd	sec	2.6	2.3 to 2.9	3.0	2.7 to 3.3	2.9	2.6 to 3.2	
	2			extend	sec	2.6	2.3 to 2.9	3.0	2.7 to 3.3	2.9	2.6 to 3.2	
4	1	Bucket speed		crowd	sec	2.7	2.4 to 3.0	2.8	2.5 to 3.1	←	←	Oil temp. 50±5°C(122±41°F)
	2			dump	sec	1.9	1.6 to 2.2	←	←	←	←	
5	1	Dozer speed		G to up	sec	0.8	0.5 to 1.1	←	←	←	←	Ground to max. up
	2			Max up	sec	2.3	2.0 to 2.6	2.2	1.9 to 2.5	←	←	Max. up to max. down
	3			G to down	sec	1.0	0.7 to 1.3	←	←	←	←	
	4			Max. down	sec	3.0	2.7 to 3.3	2.8	2.5 to 3.1	←	←	
6	1	Arm cylinder cavitation			mm	0.0	5.0 >	←	←	←	←	Oil temp. 95±5°C(203±41°F)
					inch	0.0	0.2 >	←	←	←	←	
7	1	Max. digging height radius			mm	2210.0	1989.0 to 2431.0	2490.0	2241.0 to 2739.0	-	- - -	
					inch	87.0	78.3 to 95.7	98.0	88.2 to 107.8	-	- - -	
	2			(Long)	mm	2390.0	2151.0 to 2629.0	2650.0	2385.0 to 2915.0	2650.0	2385.0 to 2915.0	
					inch	94.1	84.7 to 103.5	104.3	93.9 to 114.8	104.3	93.9 to 114.8	
	3	Max. dump height radius			mm	2500.0	2350.0 to 2650.0	2210.0	2077.0 to 2343.0	-	- - -	at bucket pin
					inch	98.4	92.5 to 104.3	87.0	81.8 to 92.2	-	- - -	
	4			(Long)	mm	2670.0	2510.0 to 2830.0	2430.0	2284.0 to 2576.0	2530.0	2378.0 to 2682.0	
					inch	105.1	98.8 to 111.4	95.7	89.9 to 101.4	99.6	93.6 to 105.6	
	5	Bucket bottom height at arm vertical			mm	1550.0	1504.0 to 1597.0	1560.0	1513.0 to 1607.0	-	- - -	Bucket horizontal
					inch	61.0	59.2 to 62.9	61.4	59.6 to 63.3	-	- - -	
	6			(Long)	mm	1310.0	1271.0 to 1349.0	1370.0	1329.0 to 1411.0	1320.0	1280.0 to 1360.0	
					inch	51.6	50.0 to 53.1	53.9	52.3 to 55.6	52.0	50.4 to 53.5	
	7	Bucket wrist angle			degree	180.0	177.0 to 183.0	185.0	182.0 to 188.0	←	←	

No		Specificatios Items			Unit	KX61-3 EU		KX71-3 EU		KX71-3 PP		Remarks
						Std value	Allowable range	Std value	Allowable range	Std value	Allowable range	
Q6		**Swivel, swing performance**										
1	1	Swivel torque		L	kgf•m	438.6	377.4 <	489.6	418.2 <	420.0	357.0 <	Arm extend,show/ Quick
					kN.m	4.3	3.7 <	4.8	4.1 <	4.1	3.5 <	
					ft•lbs	3172.4	2729.7 <	3541.3	3024.8 <	3037.9	2582.2 <	
	2			R	kgf•m	438.6	377.4 <	489.6	418.2 <	420.0	357.0 <	
					kN.m	4.3	3.7 <	4.8	4.1 <	4.1	3.5 <	
					ft•lbs	3172.4	2729.7 <	3541.3	3024.8 <	3037.9	2582.2 <	
2	1	Swivel angle		L	deg	21.3	19.0 <	18.8	17.0 <	16.0	14.0 <	Bucket load=JIS heaped×1.8
	2			R	deg	21.3	19.0 <	18.8	17.0 <	16.0	14.0 <	
3	1	Swivel block performance	Engine stop	L	deg	0.0	5.0 >	←	←	←	←	On 20 degree slope, 1 min. bucket heaped capacity
	2			R	deg	0.0	5.0 >	←	←	←	←	
	3		Engine idle	L	deg	0.0	30.0 >	←	←	←	←	Lever lock release,
	4			R	deg	0.0	30.0 >	←	←	←	←	
4	1	Swivel start-up speed		L	sec	2.0	1.7 to 2.3	←	←	2.5	2.2 to 2.8	0 to 90 deg swivel, bucket heaped, engine Max.
	2			R	sec	2.0	1.7 to 2.3	←	←	2.5	2.2 to 2.8	
5	1	Swing speed		L	sec	6.5	6.0 to 7.0	6.1	5.6 to 6.6	←	←	Empty bucket load. Engine max.
	2			R	sec	6.2	5.7 to 6.7	5.6	5.1 to 6.1	←	←	
6	1	Swing Lock	Cylinder dislocation	Swivel R&L	mm	0.0	10.0 >	←	←	←	←	90 deg-swivel, 100 times actual digging
					inch	0.0	0.4 >	←	←	←	←	
	2	Reciprocating motion	L / R	Swing	mm	0.0	0.0 >	←	←	←	←	90 deg-swivel, 100 times
					inch	0.0	0.0 >	←	←	←	←	
Q7		**Hydraulic performance**										
1	1	Relief pressure setting		P1	kgf/cm^2	230.0	225.4 to 240.7	240.0	234.6 to 249.9	220.0	215.2 to 220.3	At pump delivery 50±5°C
					MPa	22.6	22.1 to 23.6	23.5	23.0 to 24.5	21.6	21.1 to 21.6	
					bar	2.2	2.2 to 2.3	2.3	2.3 to 2.4	2.1	2.1 to 2.1	
					psi	3271.4	3206.2 to 3423.8	3413.6	3336.8 to 3554.4	3129.1	3061.1 to 3133.7	
	2			P2	kgf/cm^2	230.0	225.4 to 240.7	240.0	234.6 to 249.9	220.0	215.2 to 220.3	
					MPa	22.6	22.1 to 23.6	23.5	23.0 to 24.5	21.6	21.1 to 21.6	
					bar	2.2	2.2 to 2.3	2.3	2.3 to 2.4	2.1	2.1 to 2.1	
					psi	3271.4	3206.2 to 3423.8	3413.6	3336.8 to 3554.4	3129.1	3061.1 to 3133.7	

No		Specificatios Items			Unit	KX61-3 EU		KX71-3 EU		KX71-3 PP		Remarks
						Std value	Allowable range	Std value	Allowable range	Std value	Allowable range	
1	3			P3	kgf/cm^2	175.0	170.3 to 180.5	210.0	205.0 to 215.2	210.0	205.0 to 215.2	
					MPa	17.2	16.7 to 17.7	20.6	20.1 to 21.1	20.6	20.1 to 21.1	
					bar	1.7	1.6 to 1.7	2.0	2.0 to 2.1	2.0	2.0 to 2.1	
					psi	2489.1	2422.8 to 2567.9	2986.9	2916.1 to 3061.1	2986.9	2916.1 to 3061.1	
	4			P4	kgf/cm^2	40.0	34.7 to 44.9	←	←	←	←	
					MPa	3.9	3.4 to 4.4	←	←	←	←	
					bar	3.9	3.9 to 5.0	←	←	←	←	
					psi	568.9	493.3 to 638.3	←	←	←	←	
2	1	Cylinder oil sealing capacity	Boom	50±5°C (122±41°F)	mm	1.0	20.0 >	←	←	←	←	Arm extend, bucket
					inch	0.0	0.8 >	←	←	←	←	
	2			95±5°C (203±41°F)	mm	2.0	20.0 >	←	←	←	←	
					inch	0.1	0.8 >	←	←	←	←	
	3		Arm	50±5°C (122±41°F)	mm	1.0	11.0 >	←	←	←	←	height 1m, 10 min.
					inch	0.0	0.4 >	←	←	←	←	
	4		Bucket	50±5°C (122±41°F)	mm	1.0	10.0 >	←	←	←	←	Bucket load=JIS heaped×1.8
					inch	0.0	0.4 >	←	←	←	←	
	5		Dozer	50±5°C (122±41°F)	mm	2.0	20.0 >	←	←	←	←	
					inch	0.1	0.8 >	←	←	←	←	
3	1	Boom cushioning performance		30°C(86°F)	sec	3.0	3.0 >	←	←	←	←	
	2			50°C(122°F)	sec	0.4 to1.3	0.4 to 1.3	←	←	←	←	
	3			80°C(176°F)	sec	0.3	0.3 <	←	←	←	←	
Q8		**Lever operating force & stroke**										
1	1	Boom lever operating force		up	kgf	1.0	0.5 to 1.5	←	←	1.4	0.9 to 1.9	
					N	10.0	5.0 to 15.0	←	←	14.0	9.0 to 19.0	
					lbw	7.4	3.7 to 11.1	←	←	10.3	6.6 to 14.0	
	2			down	kgf	1.0	0.5 to 1.5	←	←	1.4	0.9 to 1.9	
					N	10.0	5.0 to 15.0	←	←	14.0	9.0 to 19.0	
					lbw	7.4	3.7 to 11.1	←	←	10.3	6.6 to 14.0	
	3	Arm lever		crowd	kgf	1.0	0.5 to 1.5	←	←	1.43	0.9 to 1.9	Extend & crowd
					N	10.0	5.0 to 15.0	←	←	14.0	9.0 to 19.0	
					lbw	7.4	3.7 to 11.1	←	←	10.3	6.6 to 14.0	

No		Specificatios Items			Unit	KX61-3 EU		KX71-3 EU		KX71-3 PP		Remarks
						Std value	Allowable range	Std value	Allowable range	Std value	Allowable range	
1	4			extend	kgf	1.0	0.5 to 1.5	←	←	1.43	0.9 to 1.9	
					N	10.0	5.0 to 15.0	←	←	14.0	9.0 to 19.0	
					lbw	7.4	3.7 to 11.1	←	←	10.3	6.6 to 14.0	
	5	Bucket lever		crowd	kgf	1.0	0.5 to 1.5	←	←	1.43	0.9 to 1.9	Dump & crowd
					N	10.0	5.0 to 15.0	←	←	14.0	9.0 to 19.0	
					lbw	7.4	3.7 to 11.1	←	←	10.3	6.6 to 14.0	
	6			extend	kgf	1.0	0.5 to 1.5	←	←	1.43	0.9 to 1.9	
					N	10.0	5.0 to 15.0	←	←	14.0	9.0 to 19.0	
					lbw	7.4	3.7 to 11.1	←	←	10.3	6.6 to 14.0	
	7	Swivel (Swing) lever		R	kgf	1.0	0.5 to 1.5	←	←	1.43	0.9 to 1.9	Left & right
					N	10.0	5.0 to 15.0	←	←	14.0	9.0 to 19.0	
					lbw	7.4	3.7 to 11.1	←	←	10.3	6.6 to 14.0	
	8			L	kgf	1.0	0.5 to 1.5	←	←	1.43	0.9 to 1.9	
					N	10.0	5.0 to 15.0	←	←	14.0	9.0 to 19.0	
					lbw	7.4	3.7 to 11.1	←	←	10.3	6.6 to 14.0	
	9	Dozer lever		up	kgf	2.6	2.0 to 3.1	←	←	2.4	1.9 to 3.0	Up & down
					N	25.0	20.0 to 30.0	←	←	24.0	19.0 to 29.0	
					lbw	18.4	14.8 to 22.1	←	←	17.4	14.0 to 21.4	
	10			down	kgf	2.6	2.0 to 3.1	←	←	2.4	1.9 to 3.0	
					N	25.0	20.0 to 30.0	←	←	24.0	19.0 to 29.0	
					lbw	18.4	14.8 to 22.1	←	←	17.4	14.0 to 21.4	
	11	Travel lever	L	Forward	kgf	1.6	1.1 to 2.1	←	←	1.6	1.1 to 2.1	
					N	16.0	11.0 to 21.0	←	←	16.0	11.0 to 21.0	
					lbw	11.8	8.1 to 15.5	←	←	11.6	8.1 to 15.5	
	12			Back	kgf	1.6	1.1 to 2.1	←	←	1.6	1.1 to 2.1	
					N	16.0	11.0 to 21.0	←	←	16.0	11.0 to 21.0	
					lbw	11.8	8.1 to 15.5	←	←	11.6	8.1 to 15.5	
	13		R	Forward	kgf	1.6	1.1 to 2.1	←	←	1.6	1.1 to 2.1	
					N	16.0	11.0 to 21.0	←	←	16.0	11.0 to 21.0	
					lbw	11.8	8.1 to 15.5	←	←	11.6	8.1 to 15.5	
	14			Back	kgf	1.6	1.1 to 2.1	←	←	1.6	1.1 to 2.1	
					N	16.0	11.0 to 21.0	←	←	16.0	11.0 to 21.0	
					lbw	11.8	8.1 to 15.5	←	←	11.6	8.1 to 15.5	

No		Specificatios Items			Unit	KX61-3 EU		KX71-3 EU		KX71-3 PP		Remarks
						Std value	Allowable range	Std value	Allowable range	Std value	Allowable range	
Q8	15	Accelerator lever		up	kgf	4.9	3.4 to 6.4	←	←	←	←	
					N	48.0	33.0 to 63.0	←	←	←	←	
					lbw	35.4	24.3 to 46.5	←	←	←	←	
	16			down	kgf	4.4	2.9 to 5.9	←	←	←	←	
					N	43.0	28.0 to 58.0	←	←	←	←	
					lbw	31.7	20.7 to 42.8	←	←	←	←	
1	17	Swing pedal		R	kgf	3.4	2.3 to 4.4	←	←	4.59	3.6 to 5.6	
					N	33.0	23.0 to 43.0	←	←	45.0	35.0 to 55.0	
					lbw	24.3	17.0 to 31.7	←	←	33.2	25.8 to 40.6	
	18			L	kgf	3.4	2.3 to 4.4	←	←	4.59	3.6 to 5.6	
					N	33.0	23.0 to 43.0	←	←	45.0	35.0 to 55.0	
					lbw	24.3	17.0 to 31.7	←	←	33.2	25.8 to 40.6	
	19	SP pedal		R	kgf	4.4	3.4 to	←	←	4.59	3.6 to 5.6	Up & down
					N	43.0	33.0 to 53.0	←	←	45.0	35.0 to 55.0	
					lbw	31.7	24.3 to 0.0	←	←	33.2	25.8 to 40.6	
	20			L	kgf	4.4	3.4 to	←	←	4.59	3.6 to 5.6	
					N	43.0	33.0 to 53.0	←	←	45.0	35.0 to 55.0	
					lbw	31.7	24.3 to 0.0	←	←	33.2	25.8 to 40.6	
	21	Safety lock lever		up	kgf	1.2	0.2 to 2.2	←	←	←	←	Up & down
					N	12.0	2.0 to 22.0	←	←	←	←	
					lbw	8.9	1.5 to 16.2	←	←	←	←	
	22			down	kgf	3.5	2.4 to 4.5	←	←	←	←	
					N	34.0	24.0 to 44.0	←	←	←	←	
					lbw	25.1	17.7 to 32.5	←	←	←	←	
2	1	Boom lever stroke		up	mm	73.0	63.0 to 83.0	←	←	74.0	64.0 to 84.0	
					inch	2.9	2.5 to 3.3	←	←	2.9	2.5 to 3.3	
	2			down	mm	73.0	63.0 to 83.0	←	←	74.0	64.0 to 84.0	
					inch	2.9	2.5 to 3.3	←	←	2.9	2.5 to 3.3	
	3	Arm lever stroke		crowd	mm	73.0	63.0 to 83.0	←	←	74.0	64.0 to 84.0	
					inch	2.9	2.5 to 3.3	←	←	2.9	2.5 to 3.3	
	4			extend	mm	73.0	63.0 to 83.0	←	←	74.0	64.0 to 84.0	
					inch	2.9	2.5 to 3.3	←	←	2.9	2.5 to 3.3	

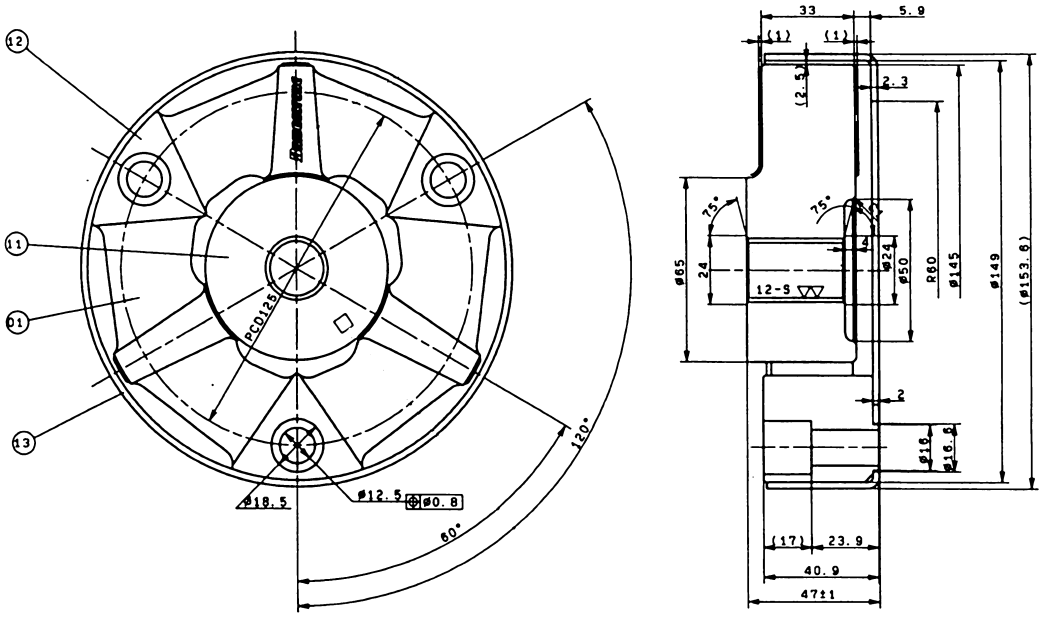
No		Specificatios Items			Unit	KX61-3 EU		KX71-3 EU		KX71-3 PP		Remarks
						Std value	Allowable range	Std value	Allowable range	Std value	Allowable range	
Q8	5	Bucket lever stroke		crowd	mm	72.0	62.0 to 82.0	←	←	←	←	
					inch	2.8	2.4 to 3.2	←	←	←	←	
	6			extend	mm	72.0	62.0 to 82.0	←	←	←	←	
					inch	2.8	2.4 to 3.2	←	←	←	←	
	7	Swivel lever stroke		R	mm	72.0	62.0 to 82.0	←	←	←	←	
					inch	2.8	2.4 to 3.2	←	←	←	←	
	8			L	mm	72.0	62.0 to 82.0	←	←	←	←	
					inch	2.8	2.4 to 3.2	←	←	←	←	
2	9	Dozer lever stroke		up	mm	51.0	41.0 to 61.0	←	←	58.0	48.0 to 68.0	
					inch	2.0	1.6 to 2.4	←	←	2.3	1.9 to 2.7	
	10			down	mm	51.0	41.0 to 61.0	←	←	58.0	48.0 to 68.0	
					inch	2.0	1.6 to 2.4	←	←	2.3	1.9 to 2.7	
	11	Travel lever stroke	L	Forward	mm	74.0	64.0 to 84.0	←	←	←	←	
					inch	2.9	2.5 to 3.3	←	←	←	←	
	12			Back	mm	74.0	64.0 to 84.0	←	←	←	←	
					inch	2.9	2.5 to 3.3	←	←	←	←	
	13		R	Forward	mm	74.0	64.0 to 84.0	←	←	←	←	
					inch	2.9	2.5 to 3.3	←	←	←	←	
	14			Back	mm	74.0	64.0 to 84.0	←	←	←	←	
					inch	2.9	2.5 to 3.3	←	←	←	←	
Q10		**Comfortability**										
1	1	Noise level	At operator's ear LPA	Canopy	db(A)	78.0	80.0 >	←	←	79.0	81.0 >	
	2			Cab	db(A)	78.0	80.0 >	←	←	79.0	81.0 >	
	3		Noise source;LWA	7m	db(A)	65.0	65.4 >	←	←	←	←	
	4				db(A)	92.9	92.9 >	←	←	←	←	

II.Machine Body

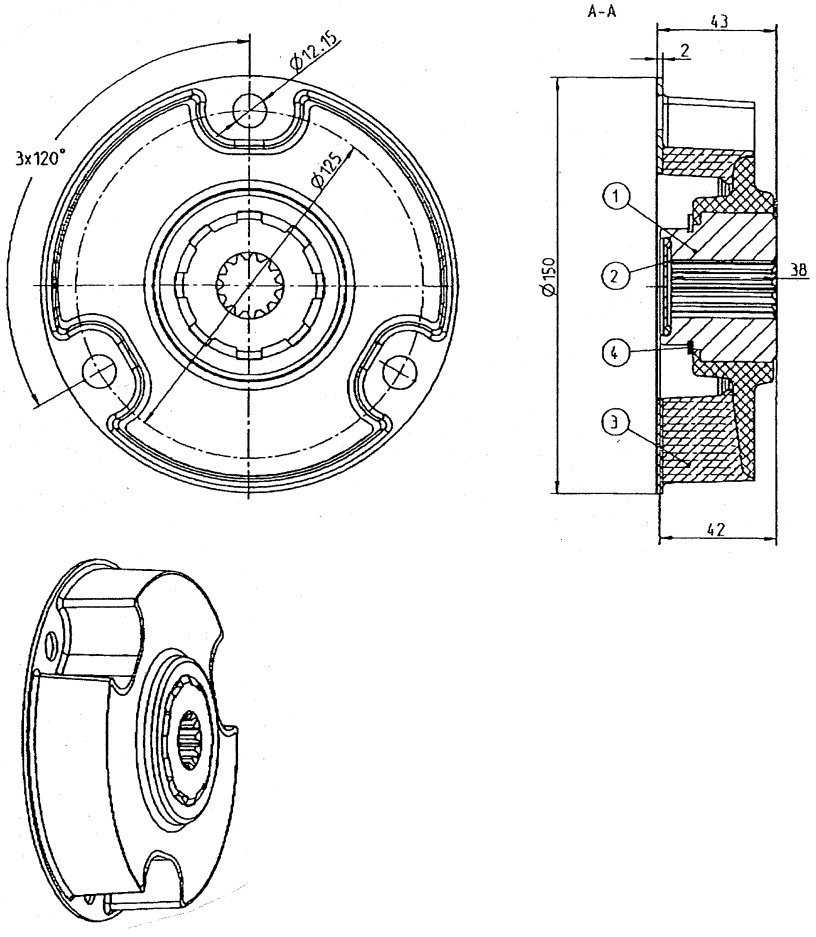
a. Main component

1. Pump coupling

1-1 KX71-3 PP - version

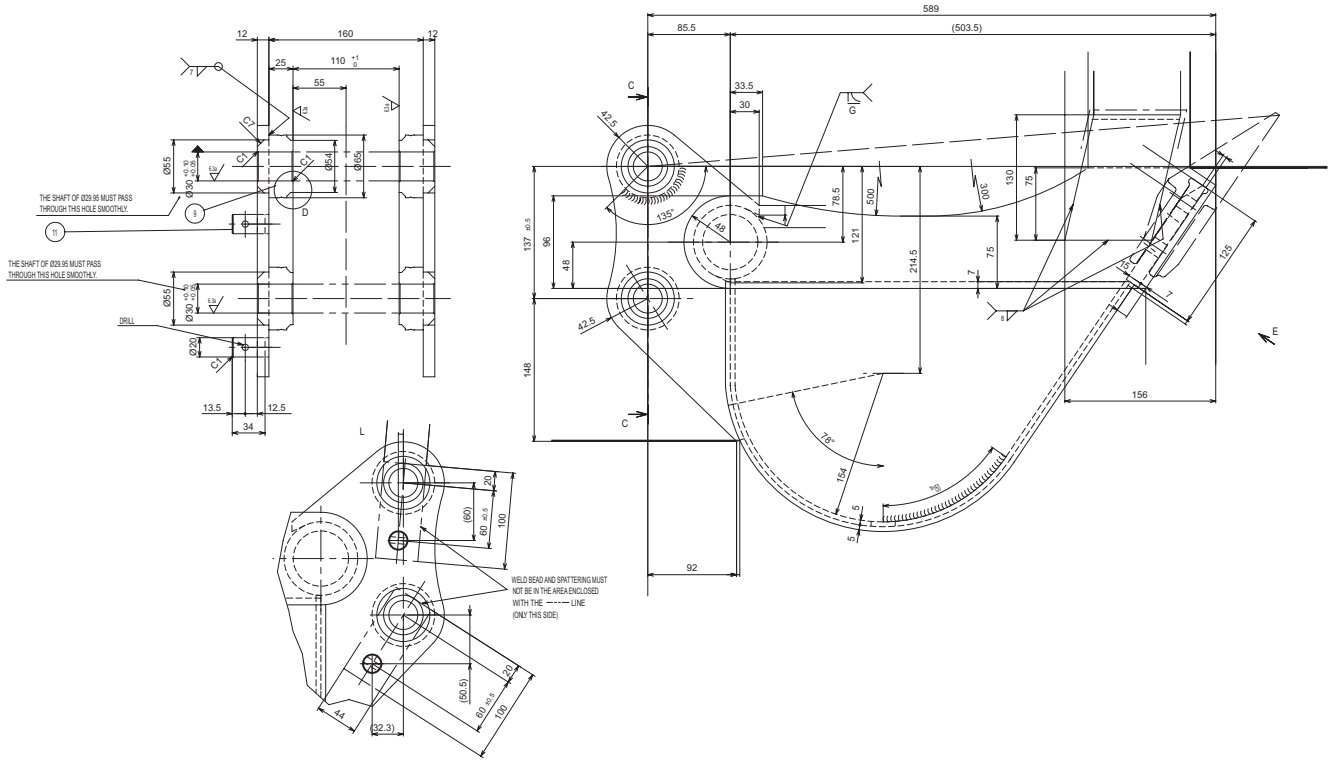


1-2 KX61-3, KX-71-3 EU- version

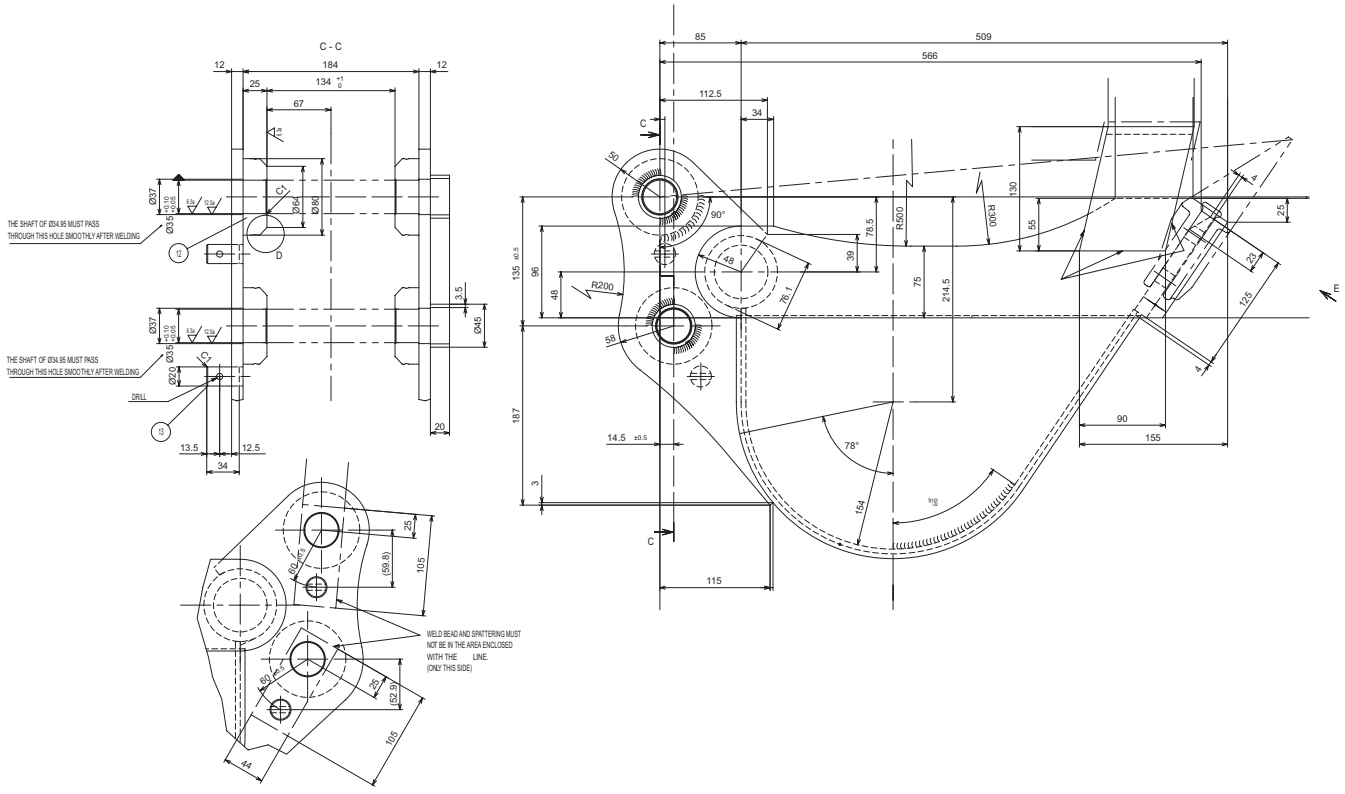


2. Bucket : Kubota standard bucket

2-1 KX-61-3



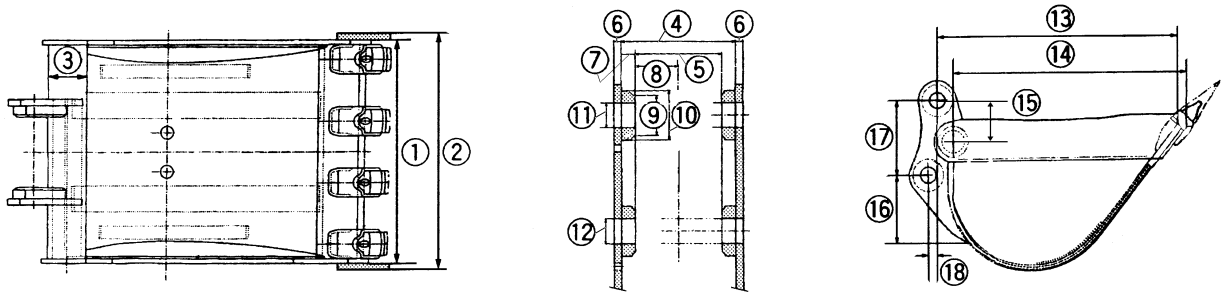
2-2 KX-71-3



2-3 Bucket dimensions

No.	Unit	KX61-3	KX71-3		Remarks
1	mm in.	448 17.6	480 18.9		
2	mm in.	472 18.6	504 19.8		
3	mm in.	ϕ76.3 × t9.5 ϕ3.00 × t0.37	ϕ76.1 × t10 ϕ3.00 × t0.39		
4	mm in.	184 7.24	←		
5	mm in.	110 4.33	134 5.28		
6	mm in.	12 0.47	←		
7	mm in.	25 0.98	←		
8	mm in.	56 2.20	67 2.64		
9	mm in.	ϕ54 ϕ2.13	ϕ64 ϕ2.52		
10	mm in.	ϕ65 ϕ2.56	ϕ80 ϕ3.15		
11	mm in.	$\phi30^{+0.10}_{+0.05}$ $\phi1.18^{+0.004}_{+0.002}$	$\phi35^{+0.10}_{+0.05}$ $\phi1.18^{+0.004}_{+0.002}$		
12	mm in.	$\phi30^{+0.10}_{+0.05}$ $\phi1.18^{+0.004}_{+0.002}$	$\phi35^{+0.10}_{+0.05}$ $\phi1.18^{+0.004}_{+0.002}$		
13	mm in.	589 23.2	594 23.4		
14	mm in.	503.5 19.8	566 22.3		
15	mm in.	78.5 3.09	←		
16	mm in.	148 5.839	187 7.36		
17	mm in.	137 5.39	135 5.31		
18	mm in.	0 0	14.5 0.57		

NOTE:KUBOTA JAPAN BUCKET



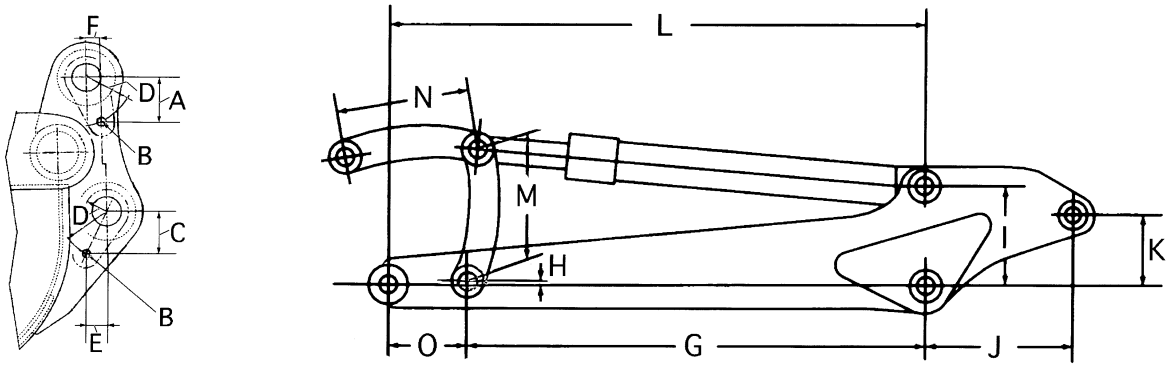
3. Bucket installation relevant dimensions

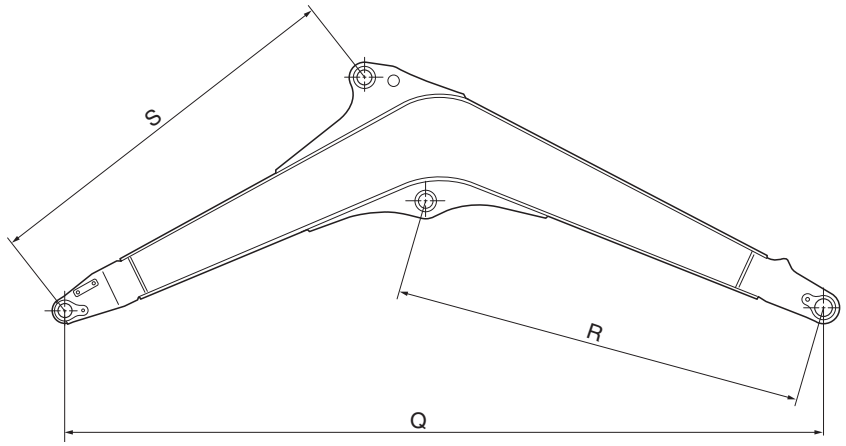
3-1 Boom, arm, bucket link

Unit : mm (inch)

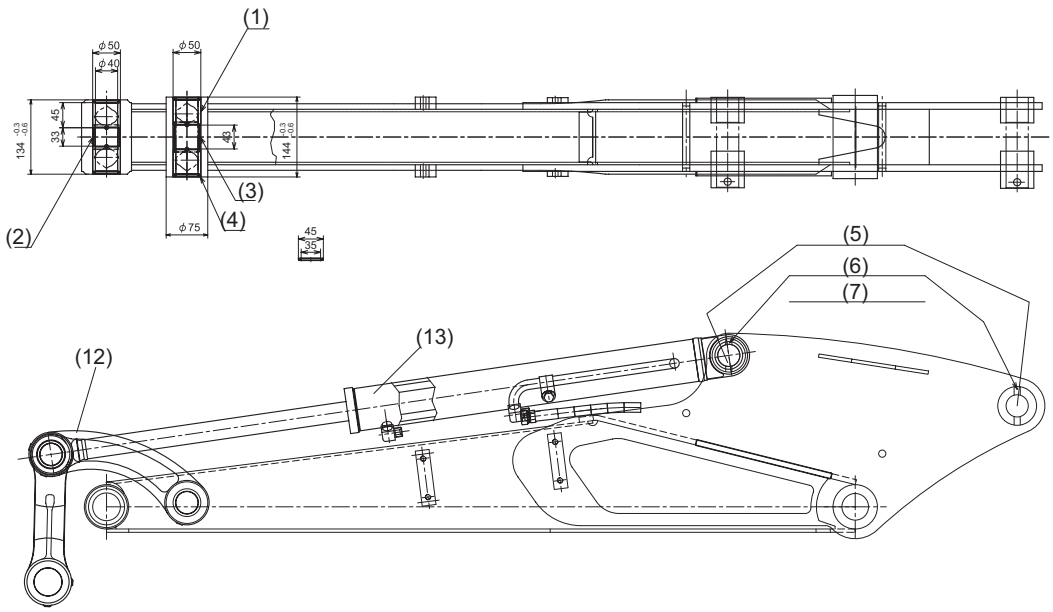
No.	KX61-3	KX71-3		Remarks
A	60 (2.36)	59.8 (2.35)		
B	ϕ20	←		
C	50.5 (1.99)	52.9 (2.08)		
D	60 (2.36)	60 (2.36)		
E	32.3 (1.27)	14.5 (0.57)		
F	5.0 (0.20)	5.0 (0.20)		
G	905 (35.6) | 1155 (45.5)	1005 (39.6) | 1205 (47.4)		
H	10.0 (0.39)	7.5 (0.30)		
I	259 (10.2)	273 (10.7)		
J	225.5 (8.88)	292 (11.5)		
K	157 (6.18)	182 (7.17)		
L	1076.5 (42.4)	990.5 (39.0) | 1122 (44.2)		
M	240 (9.45)	260 (10.2)		
N	240 (9.45)	230 (9.06)		
O	145 (5.70)	←		
P	1050 (41.3) | 1300 (51.2)	1150 (45.3) | 1350 (53.1)		
Q	2088 (82.2)	2240 (88.2)		
R	1134 (44.6)	1110 (43.7)		
S	1046 (41.2)	1166 (45.9)		

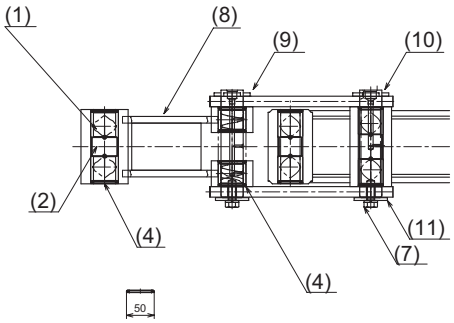
NOTE: KUBOTA JAPAN BUCKET
STANDARD ARM





3-2 Bushing



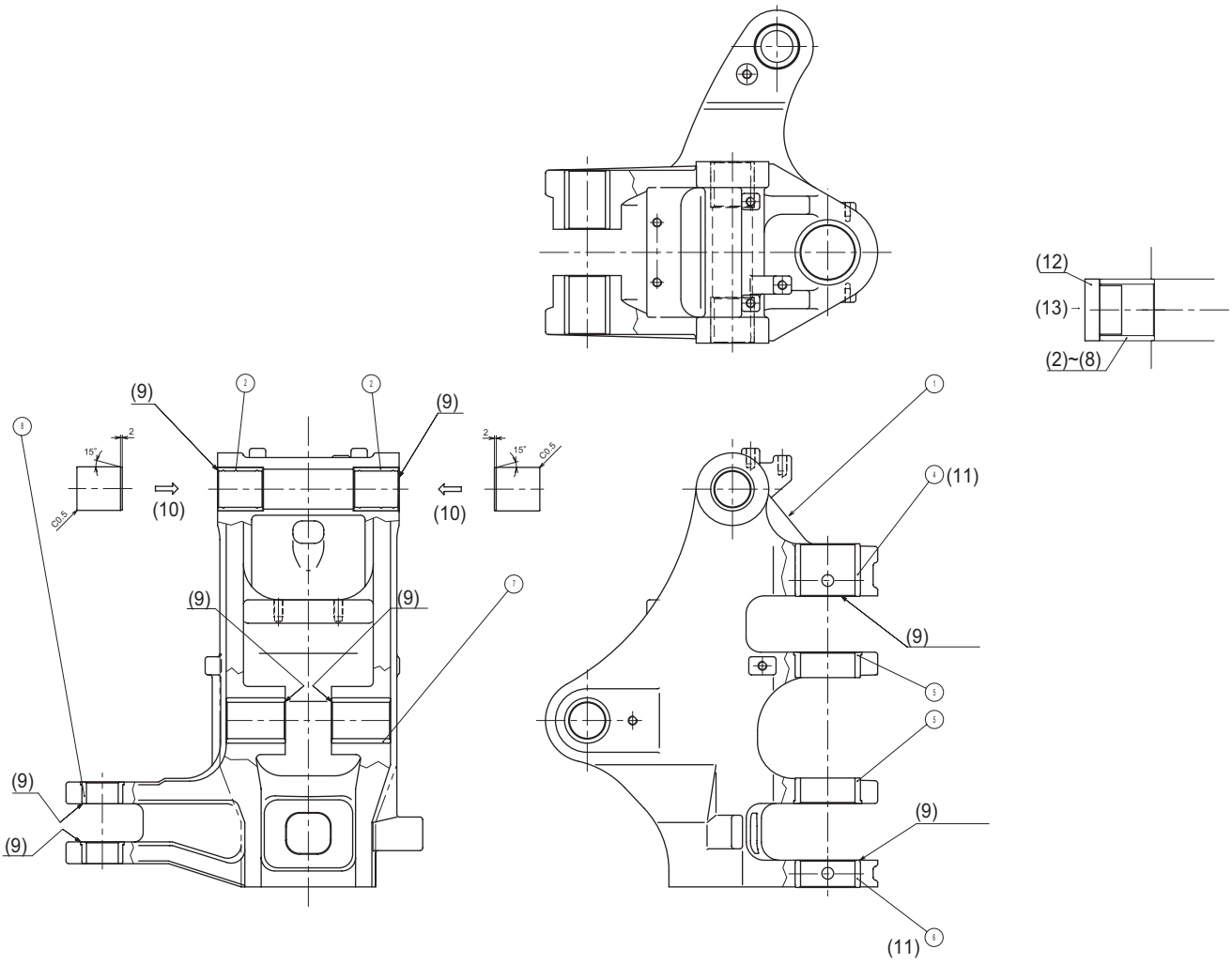


[Unit:mm]

No.	Items	KX61-3 (EU)		KX71-3 (EU)		KX71-3 (PP)	
		Parts No.	Spec.	Parts No.	Spec.	Parts No.	Spec.
(1)	Bush B	RG248-76151	35×45×45	RG248-76151	35×45×45	RC348-76151	40×50×45
(2)	Collar					RC348-66691	33
(3)	Collar					RC348-66651	43
(4)	Dust seal					RC411-66781	
(5)	Pin					RC348-66791	
(8)	Bucket Link1	RG248-66711	120 • • • 34.5	RG448-66711	144 • • • 46.5	RC348-66711	144 • • • 46.5
(9)	Pin					RC348-66771	
(10)	pin B dia	RG248-66781	35	RG448-66781	35	RC348-66781	40
(12)	Bucket Link23	RG248-66721	40-35	RG248-66721	40-35	RC348-66721	40-40
		RG248-66731		RG248-66731		RC348-66731	
(13)	bucket cylinder L/S(stroke)	RG248-67801	Refer to cylinder spec.	RG448-67801	Refer to cylinder spec.	RC348-67801	Refer to cylinder spec.
	BushA	RG248-76141	40×50×34	RG448-76241	35×45×36	RC348-76241	40×50×36
	Pin A dia	RG248-66771	30	RG448-66771	35	RC418-66761	40
	Arm boss	RG248-67111	X145Y10 38×110	RG448-67111	X145Y7.5 45×134	RC348-67111	X145Y7.5 50×134

(7) Bolt (11) Washer EU: Eurpean - version PP: North America & Oceania

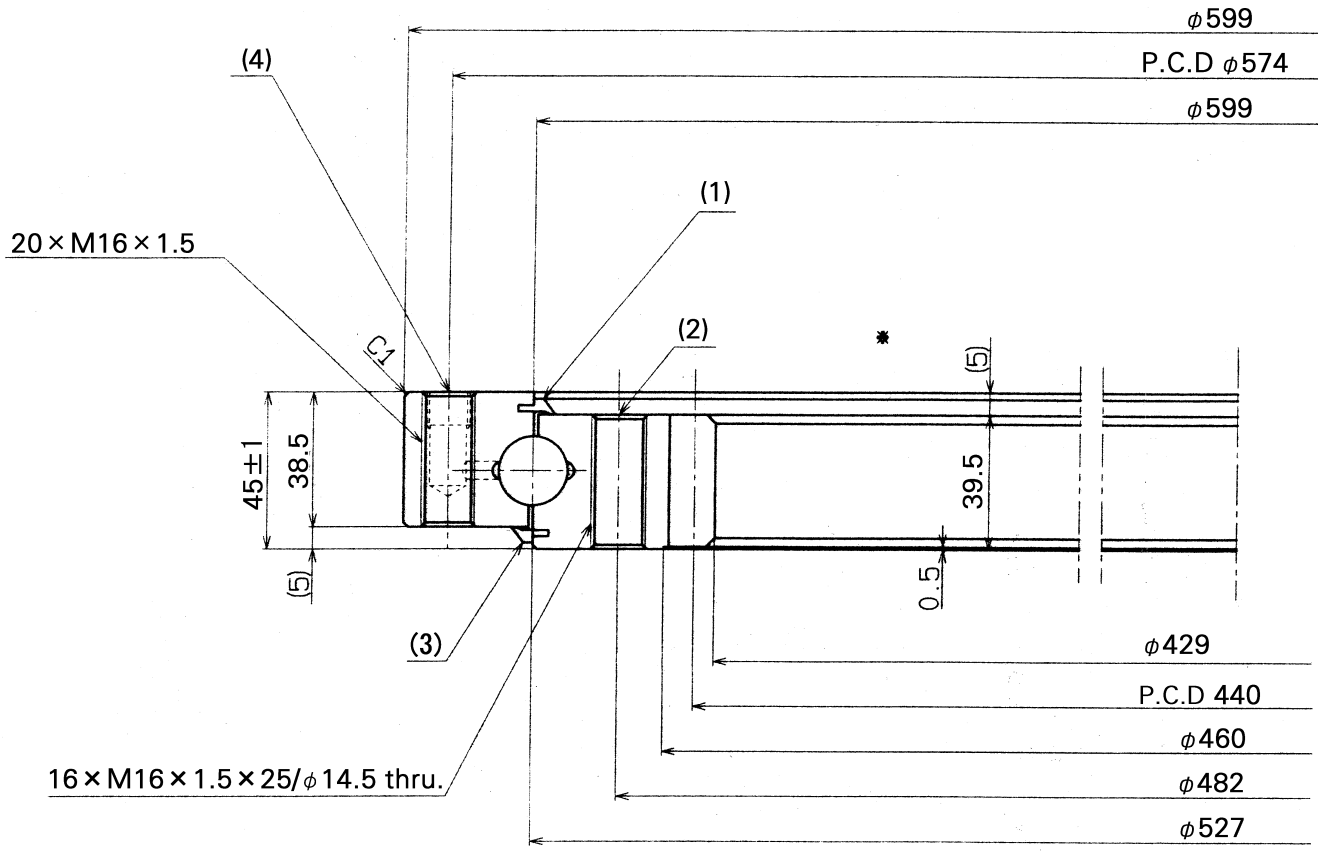
4. Swing bracket



(1) Swing bracket
(2) ~ (8) Bushing
(9) Side of the bush ( ) should flash the face.
(10) Bush press-fitting direction
(11) Check the bushing direction.
(Bolt hole should meet.)
(12) Jig.
(13) Pressing

Remarks:Service limit of pin and bush wear.
Pin : -1.0mm (-0.01 in.)
Bush : +1.0mm (+0.04in.)

5. Swivel bearing



(1) Seal B
(2) S-mark
(3) Seal A
(4) R_p 1/8, for grease nipple

Number of teeth = 80
CLEARANCE (AXIAL) : 0.05~0.12mm (0.002~0.005 in.)
P.C.D. = φ 440