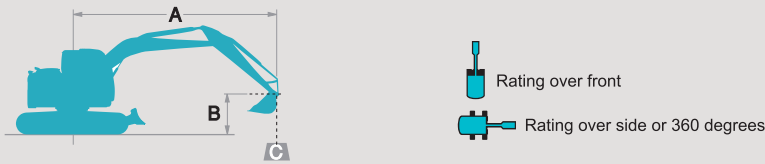


Lifting Capacities

ED160 Blade Runner



A – Reach from swing centerline for bucket hook
B – Bucket hook height above/below ground
C – Lifting capacities in pounds

ED160 Blade Runner		Arm: 7'10" {2.38m} Bucket: 0.65cu.yd. {0.50m³} SAE heaped 840 lbs {380kg} Shoe: 23'6" {600mm} Blade; Front side and Blade up										
B	A	4'11" {1.5m}		9'10" {3.0m}		14'9" {4.5m}		19'8" {6.0m}		At Max. Reach		Radius
24'7" {7.5m}	lb{kg}									*3,360{1,520}	*3,360{1,520}	13'8" {4.17m}
19'8" {6.0m}	lb{kg}					*6,580{2,980}	*6,580{2,980}			*2,790{1,260}	*2,790{1,260}	18'11" {5.77m}
14'9" {4.5m}	lb{kg}					*7,330{3,320}	*7,330{3,320}	5,100{2,310}	4,430{2,010}	*2,660{1,210}	*2,660{1,210}	21'10" {6.65m}
9'10" {3.0m}	lb{kg}			*13,300{6,030}	*13,300{6,030}	8,100{3,670}	6,850{3,110}	4,880{2,210}	4,220{1,910}	*2,750{1,250}	*2,750{1,250}	23'4" {7.11m}
4'11" {1.5m}	lb{kg}			14,930{6,770}	11,550{5,240}	7,420{3,360}	6,240{2,830}	4,600{2,080}	3,960{1,790}	*3,040{1,380}	*3,040{1,380}	23'8" {7.23m}
G.L.	lb{kg}			14,170{6,420}	10,920{4,950}	6,970{3,160}	5,830{2,640}	4,380{1,980}	3,760{1,700}	3,390{1,530}	3,390{1,530}	23'0" {7.02m}
-4'11" {-1.5m}	lb{kg}	*12,280{5,570}	*12,280{5,570}	14,130{6,410}	10,890{4,940}	6,820{3,090}	5,690{2,580}	4,310{1,950}	3,690{1,670}	3,860{1,750}	3,860{1,750}	21'2" {6.45m}
-9'10" {-3.0m}	lb{kg}	*18,720{8,490}	*18,720{8,490}	*14,010{6,350}	11,170{5,070}	6,950{3,150}	5,810{2,630}			5,220{2,370}	5,220{2,370}	17'8" {5.40m}

ED160 Blade Runner		Arm: 9'4" {2.84m} Bucket: 0.5 cu.yd. {0.38m³} SAE heaped 750 lbs {340kg} Shoe: 23'6" {600mm} Blade; Front side and Blade up												
B	A	5'{1.5m}		10'{3.0m}		15'{4.6m}		20'{6.1m}		25'{7.6m}		At Max. Reach		Radius
														
25' {7.6m}	lb{kg}					*3,980{1,800}	*3,980{1,800}					*3,200{1,450}	*3,200{1,450}	15'7" {4.77m}
20' {6.1m}	lb{kg}					*5,610{2,540}	*5,610{2,540}	*3,470{1,570}	*3,470{1,570}			*2,670{1,210}	*2,670{1,210}	20'6" {6.26m}
15' {4.6m}	lb{kg}					*6,290{2,850}	*6,290{2,850}	4,930{2,230}	4,280{1,940}			*2,520{1,140}	*2,520{1,140}	23'4" {7.11m}
10' {3.0m}	lb{kg}			*10,930{4,950}	*10,930{4,950}	7,900{3,580}	6,700{3,030}	4,670{2,110}	4,040{1,830}			*2,560{1,160}	*2,560{1,160}	24'9" {7.56m}
5' {1.5m}	lb{kg}			14,640{6,640}	11,390{5,160}	7,150{3,240}	6,010{2,720}	4,340{1,960}	3,740{1,690}	2,850{1,290}	2,460{1,110}	*2,780{1,260}	2,430{1,100}	25'2" {7.68m}
G.L.	lb{kg}			13,430{6,090}	10,370{4,700}	6,580{2,980}	5,500{2,490}	4,070{1,840}	3,480{1,570}			2,850{1,290}	2,450{1,110}	24'6" {7.48m}
-5' {-1.5m}	lb{kg}	*10,610{4,810}	*10,610{4,810}	13,160{5,960}	10,150{4,600}	6,340{2,870}	5,280{2,390}	3,940{1,780}	3,360{1,520}			3,200{1,450}	2,750{1,240}	22'9" {6.94m}
-10' {-3.0m}	lb{kg}	*16,440{7,450}	*16,440{7,450}	13,380{6,060}	10,330{4,680}	6,380{2,890}	5,320{2,410}					4,190{1,900}	3,570{1,610}	19'6" {5.95m}
-15' {-4.6m}	lb{kg}			*8,890{4,030}	*8,890{4,030}							*5,950{2,690}	*5,950{2,690}	13'10" {4.22m}

1. Do not attempt to lift or hold any load that is greater than these lift capacities at their specified lift point radius and heights. Weight of all accessories must be deducted from the above lift capacities.

2. Lift capacities are based on machine standing on level, firm, and uniform ground. User must make allowance for job conditions such as soft or uneven ground, out of level conditions, side loads, sudden stopping of loads, hazardous conditions, experience of personnel, etc.

3. Bucket lift hook is defined as lift point.
4. The above lifting capacities are in compliance with SAE J/ISO 10567. They do not exceed 87 % of hydraulic lifting capacity or 75 % of tipping load. Lifting capacities marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

5. Operator should be fully acquainted with the Operator's and Maintenance Instructions before operating this machine. Rules for safe operation of equipment should be adhered to at all times.

6. Lift capacities apply to only machines as originally manufactured and normally equipped by KOBELCO CONSTRUCTION MACHINERY CO., LTD.

Note: This catalog may contain attachments and optional equipment that are not available in your area. It may also contain photographs of machines with specifications that differ from those of machines sold in your area. Please consult your nearest KOBELCO distributor for those items you require. Due to our policy of continuous product improvements all designs and specifications are subject to change without advance notice. Copyright by **KOBELCO CONSTRUCTION MACHINERY CO., LTD.** No part of this catalog may be reproduced in any manner without notice.

KOBELCO CONSTRUCTION MACHINERY U.S.A. INC.

4690 World Houston Parkway Houston, TX 77032
http://www.kobelco-usa.com/

Inquiries To:



ED160 Blade Runner

Hydraulic Excavators

ED160 Blade Runner



- Bucket Capacity :

0.65 cu.yd. (0.50m³) SAE Heaped
- Engine Power :

92.8hp (69.2kW) /2,000 rpm
(SAE NET)
- Operating Weight :

35,700lb (16,200kg)

Complies with the latest exhaust emission regulations



US EPA
Interim Tier IV



EU (NRMM)
Stage III B



Japanese
Regulations





Engine

Model	MITSUBISHI D04EG-74kW-01
Type:	Direct injection, water-cooled, 4-cycle diesel engine With turbocharger, intercooler
No. of cylinders:	4
Bore and stroke:	3.70" (94 mm) x 4.72" (120 mm)
Displacement:	203.3 cu.in. (3.331 L)
Rated power output:	92.8 hp {69.2kW} /2,000 rpm (SAE NET)
Max. torque:	265 lb-ft {359N·m} /1,600 rpm (SAE NET)



Hydraulic System

Pump	
Type:	Two variable displacement pumps + 2 gear pump
Max. discharge flow:	2 x 34.3 U.S.gph {2 x 130L/min} , 1 x 5.3 U.S.gph {1 x 20L/min} 1 × 14.5 U.S.gph {1 × 55L/min}
Relief valve setting	
Boom, arm and bucket:	5,480psi {37.8Mpa}
Dozer blade, angle and tilt:	3,970psi {27.4Mpa}
Travel circuit:	4,970psi {34.3Mpa}
Swing circuit:	4,060psi {28.0Mpa}
Control circuit:	725psi {5.0Mpa}
Pilot control pump:	Gear type
Main control valves:	8-spool
Oil cooler:	Air cooled type



Swing System

Swing motor:	Axial piston motor
Parking brake:	Oil disc brake, hydraulic operated automatically
Swing speed:	11.0 rpm
Swing torque:	29.400 lb-ft {39.9 kN·m} (SAE)
Tail swing radius:	4'11" {1,490 mm}
Min. front swing radius:	6'7" {2,000mm}



Attachments

Backhoe bucket and arm combination

Use		Backhoe bucket						
		Normal digging						
Bucket capacity	SAE heaped cu.yd.{m³}	0.31 {0.24}	0.41 {0.31}	0.50 {0.38}	0.59 {0.45}	0.65 {0.50}	0.75 {0.57}	0.90 {0.70}
	Struck cu.yd.{m³}	0.26 {0.20}	0.30 {0.23}	0.37 {0.28}	0.46 {0.35}	0.50 {0.38}	0.56 {0.43}	0.65 {0.50}
Opening width	With side cutter inches {mm}	23 {590}	28 {700}	31 {800}	36 {915}	39 {1,000}	43 {1,100}	—
	Without side cutter inches {mm}	20 {500}	24 {600}	28 {700}	31 {815}	35 {900}	39 {1,000}	45 {1,150}
No. of bucket teeth		3	3	4	4	5	5	5
Bucket weight lbs {kg}		620 {280}	660 {300}	750 {340}	790 {360}	840 {380}	880 {400}	900 {410}
Combinations	7'10" {2.38 m} arm	○	○	○	○	◎	△	△
	9'4" {2.84 m} arm	○	○	◎	△	—	—	—

◎ Standard ○ Recommended △ Loading only



Travel System

Travel motors:	2 x axial piston, two-speed motors
Parking brakes:	Oil disc brake per motor
Travel shoes:	40 each side
Travel speed:	4.0 / 2.0 mph {6.5 / 3.2 km/h}
Drawbar pulling force:	32,600 lbs {145 kN} (SAE J 1309)
Gradeability:	70 % {35°}



Cab & Control

Cab
All-weather, sound-suppressed steel cab mounted on the silicon-sealed viscous mounts and equipped with a heavy, insulated floor mat.
Control
Two hand levers and two foot pedals for travel
Two hand levers for excavating and swing
Electric rotary-type engine throttle



Boom, Arm & Bucket

Boom cylinder:	3.9" {100 mm} x 3'7" {1,092 mm}
Arm cylinder:	4.5" {115 mm} x 3'8" {1,120 mm}
Bucket cylinder:	3.7" {95 mm} x 3'0" {903 mm}



Dozer Blade, Angle & Tilt

Dozer cylinder:	4.5" {114mm} × 8.3" {210mm}
Angle cylinder:	4.0" {102mm} × 1'10" {552mm}
Tilt cylinder:	4.0" {102mm} × 5.0" {127mm}
Dimension:	10'8" {3,260mm} (width) × 2'8" {815mm} (height)
Working range:	Digging depth x Lift height 2'7" {790mm} × 1'12" {600mm}
	Maximum tilt height 1'6" {445mm}
	Maximum angle 25°



Refilling Capacities & Lubrications

Fuel tank:	52.8 U.S.gal {200 L}
Cooling system:	3.40 U.S.gal {13 L}
Engine oil:	3.04 U.S.gal {11.5 L}
Travel reduction gear:	2 x 0.55 U.S.gal {2 x 2.1 L}
Swing reduction gear:	0.44 U.S.gal {1.65 L}
Hydraulic oil tank:	22.5 U.S.gal {85.2 L} tank oil level
	33.5 U.S.gal {126.7 L} hydraulic system



Working Ranges

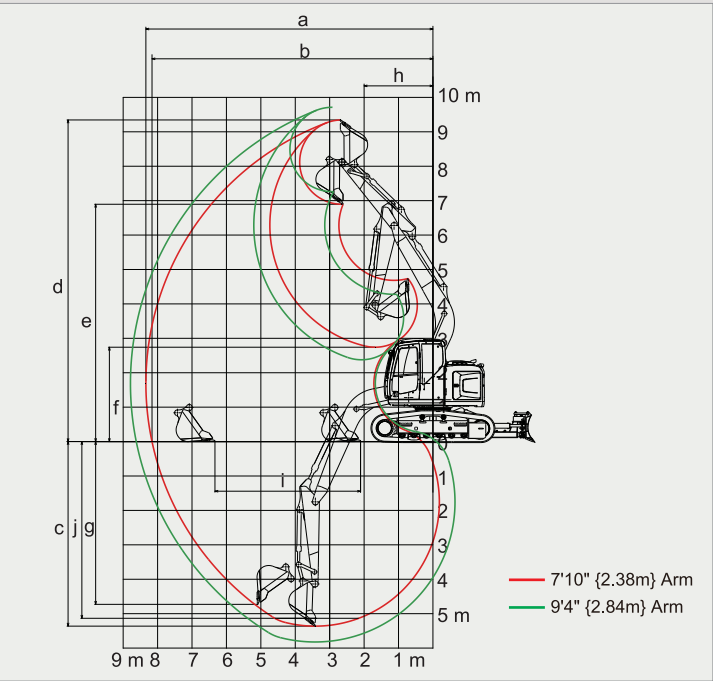
Boom		15'4" {4.68m}	
Range	Arm	7'10" {2.38m}	9'4" {2.84m}
		7'10" {2.38m}	9'4" {2.84m}
a- Max. digging reach		27'4" {8.34}	28'10" {8.78}
b- Max. digging reach at ground level		26'9" {8.16}	28'3" {8.61}
c- Max. digging depth		17'7" {5.36}	19'1" {5.82}
d- Max. digging height		30'8" {9.34}	31'10" {9.71}
e- Max. dumping clearance		22'8" {6.90}	23'10" {7.26}
f - Min. dumping clearance		8'12" {2.74}	7'10" {2.38}
g- Max. vertical wall digging depth		15'6" {4.73}	17'4" {5.29}
h- Min. swing radius		6'7" {2.00}	7'10" {2.40}
i - Horizontal digging stroke at ground level		13'11" {4.23}	15'6" {4.72}
j - Digging depth for 8 feet flat bottom		16'10" {5.13}	18'6" {5.63}
Bucket capacity SAE heaped cu.yd.{m³}		0.65 {0.50}	0.50 {0.38}

Digging Force		Unit: lbs {kN}	
Arm length		7'10" {2.38m}	9'4" {2.84m}
Bucket digging force	SAE	19,745 {87.8}	20,502 {91.2}
	ISO	20,255 {90.1}	21,357 {95.0}
Arm crowding force	SAE	14,006 {62.3}	12,634 {56.2}
	ISO	14,478 {64.4}	13,129 {58.4}

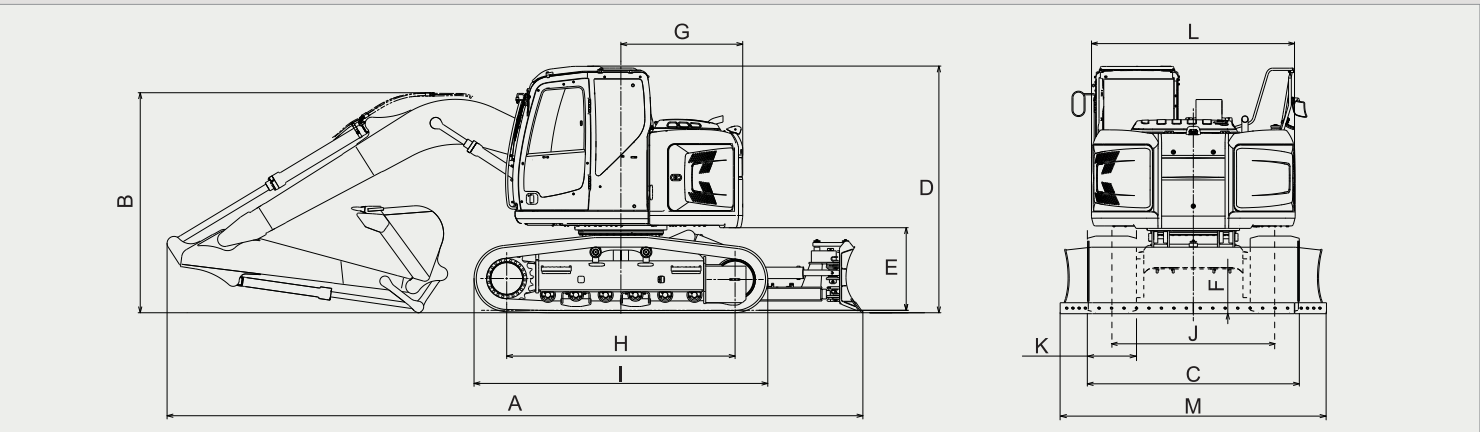


Dimensions

Arm length	7'10" {2.38m}	9'4" {2.84m}
A Overall length	28'0" {8,530}	28'3" {8,620}
B Overall height (to top of boom)	8'10" {2,700}	10'3" {3,130}
C Overall width of crawler	8'6" {2,590}	
D Overall height (to top of cab)	9'11" {3,030}	
E Ground clearance of rear end*	3'4" {1,010}	
F Ground clearance*	17.9" {455}	



		Unit: ft-in{mm}
G Tail swing radius	4'11" {1,490}	
H Tumbler distance	9'2" {2,800}	
I Overall length of crawler	11'10" {3,600}	
J Track gauge	6'6" {1,990}	
K Shoe width	23.6" {600}	
L Overall width of upperstructure	8'2" {2,490}	
M Overall Width	10'8" {3,260}	
		* Without including height of shoe lug



Operating Weight & Ground Pressure

In standard trim, with standard boom, 7'10" {2.38m} arm, 0.65cu.yd. {0.50m³} SAE heaped bucket

Shaped	Triple grouser shoes (even height)	
Shoe width	inches {mm}	23.6" {600}
Overall width of crawler	ft-in{mm}	8'6" {2,590}
Ground pressure	psi {kPa}	6.09 {42}
Operating weight	lbs {kg}	35,200 {15,900}