

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. {0.50m ³ } SAE heaped 840 lbs {380kg} Shoe: 23'6" {600mm} Blade; Front side and Blade up										
		4'11" {1.5m}		9'10" {3.0m}		14'9" {4.5m}		19'8" {6.0m}		At Max. Reach		Radius
B	A											
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. {0.38m ³ } SAE heaped 750 lbs {340kg} Shoe: 23'6" {600mm} Blade; Front side and Blade up												
		5' {1.5m}		10' {3.0m}		15' {4.6m}		20' {6.1m}		25' {7.6m}		Radius		
B	A													
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}

- 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.
- 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.
- Bucket lift hook is defined as lift point.
- 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.
- 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.
- 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.

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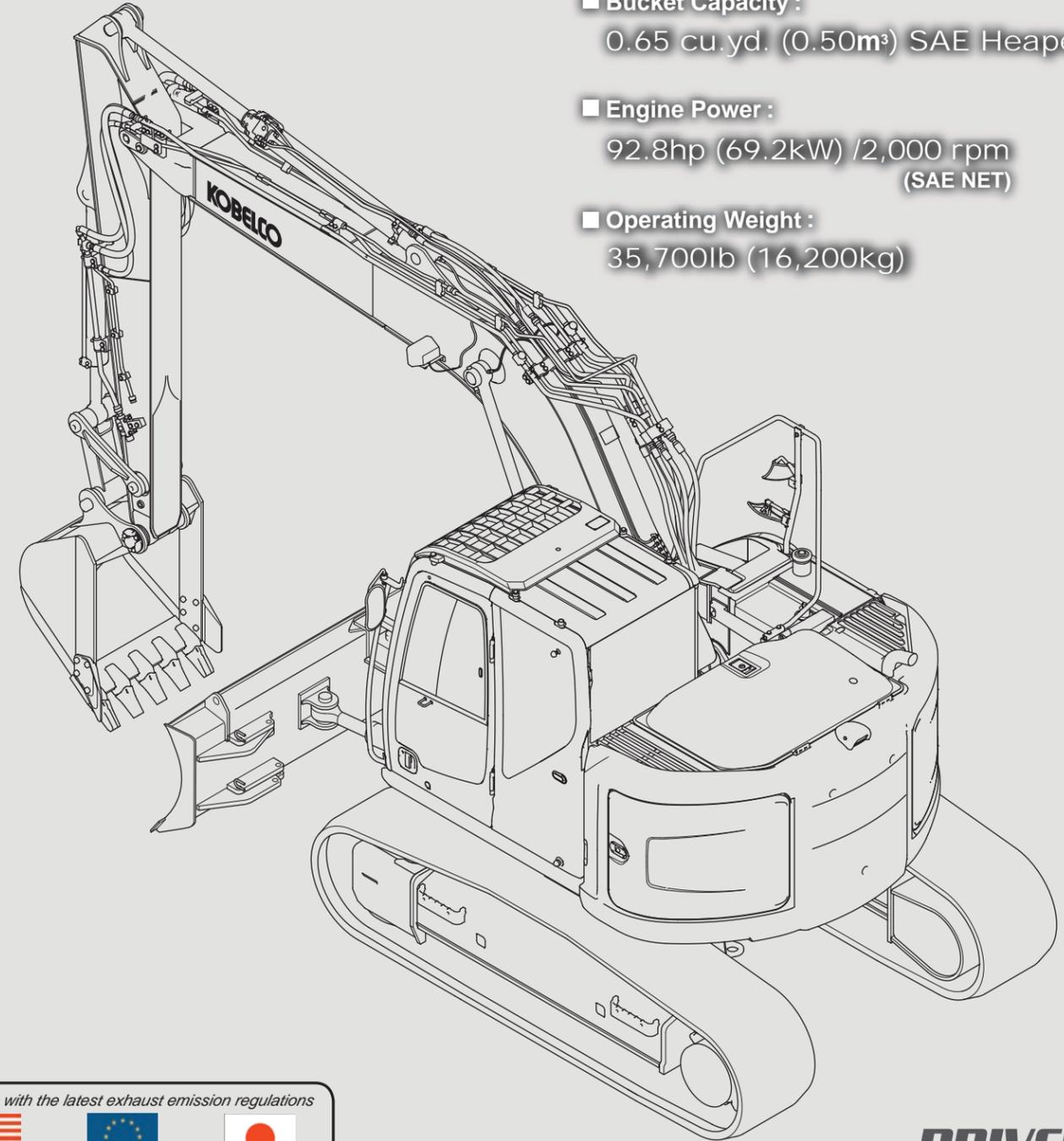
Inquiries To:

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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 x 14.5 U.S.gph {1 x 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} x 8.3" {210mm}
Angle cylinder	4.0" {102mm} x 1'10" {552mm}
Tilt cylinder	4.0" {102mm} x 5.0" {127mm}
Dimension	10'8" {3,260mm} (width) x 2'8" {815mm} (height)
Working range	Digging depth x Lift height 2'7" {790mm} x 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

Unit: ft-in{m}

Boom		15'4" {4.68m}	
Range	Arm	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}

Unit: lbs {kN}

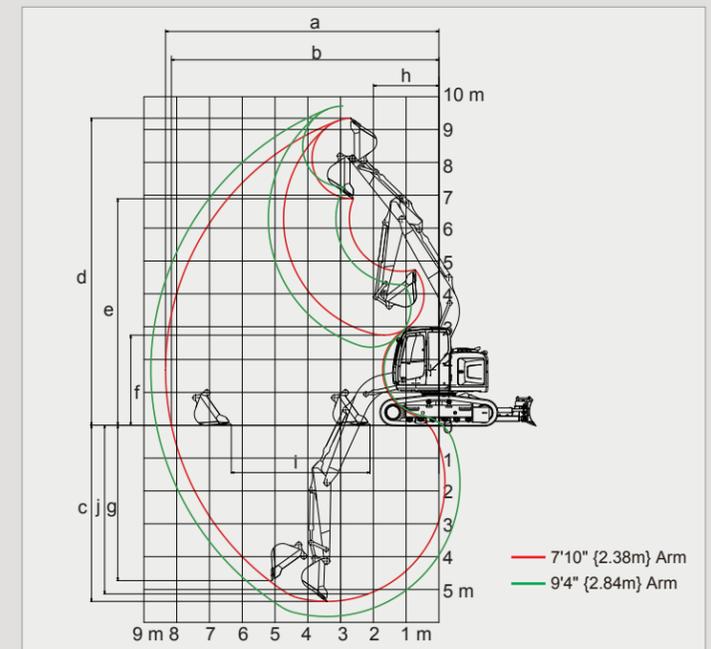
Digging Force		7'10" {2.38m}		9'4" {2.84m}	
Arm length		20,502 {91.2}		20,502 {91.2}	
Bucket digging force	SAE	20,502 {91.2}		20,502 {91.2}	
	ISO	21,357 {95.0}		21,357 {95.0}	
Arm crowding force	SAE	14,006 {62.3}		12,634 {56.2}	
	ISO	14,478 {64.4}		13,129 {58.4}	



Dimensions

Unit: ft-in{mm}

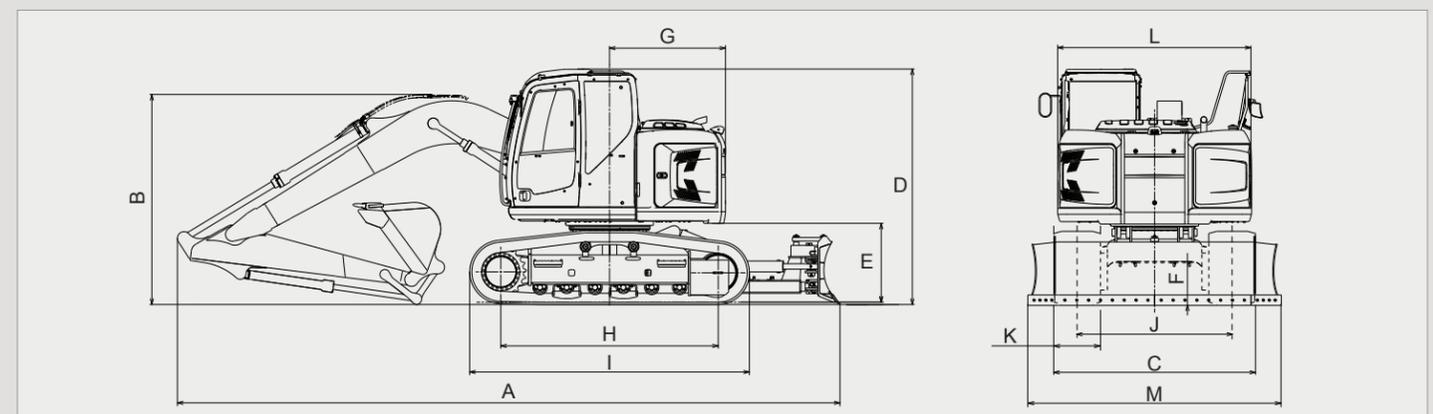
Arm length	7'10" {2.38m}	9'4" {2.84m}
A Overall length	28'0" {8,530}	28'3" {8,620}
B Overall height (to top of boom)	8'10" {2,700}	10'3" {3,130}
C Overall width of crawler	8'6" {2,590}	
D Overall height (to top of cab)	9'11" {3,030}	
E Ground clearance of rear end*	3'4" {1,010}	
F Ground clearance*	17.9"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