

KOMATSU®

D85EXi-18 **D85PXi-18** Tier 4 Final Engine

CRAWLER DOZER

D85i



intelligent
MACHINE CONTROL

Photos may include optional equipment.

NET HORSEPOWER

264 HP @ 1900 rpm
197 kW @ 1900 rpm

OPERATING WEIGHT

SIGMADOZER®
D85EXi-18: 67,439 lb 30590 kg
Straight Tilt Dozer
D85PXi-18: 65,080 lb 29520 kg

BLADE CAPACITY

SIGMADOZER®
D85EXi-18: 9.4 yd³ 7.2 m³
Straight Tilt Dozer
D85PXi-18: 7.7 yd³ 5.9 m³



SPECIFICATIONS



ENGINE

Model.....Komatsu SAA6D125E-7*
 Type 4-cycle, water-cooled, direct injection
 Aspiration..... Komatsu variable geometry turbocharged, air-to-air aftercooled
 Number of cylinders..... 6
 Bore x stroke..... 125 mm x 150 mm **4.49" x 5.69"**
 Piston displacement..... 11.04 ltr **674 in³**
 Governor.....All-speed and mid-range, electronic
 Horsepower
 SAE J1995.....Gross 199 kW **267 HP**
 ISO 9249 / SAE J1349.....Net 197 kW **264 HP**
 Rated rpm..... 1900 rpm
 Fan drive typeHydraulic
 Lubrication system
 Method Gear pump, force lubrication
 Filter..... Full-flow

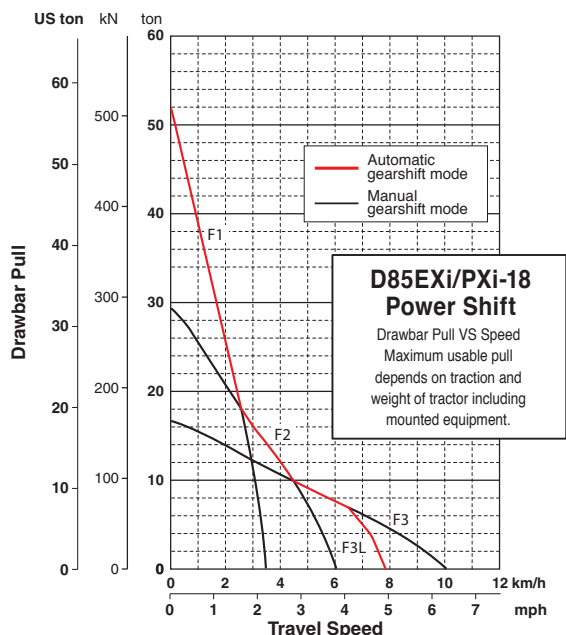
**EPA Tier 4 Final emissions certified



TORQFLOW TRANSMISSION

Komatsu TORQFLOW transmission consists of a water-cooled, 3-element, 1-stage, 1-phase and a planetary gear, multiple-disc clutch transmission which is electronically controlled, hydraulically actuated and force-lubricated for optimum heat dissipation. Shift lock lever and neutral safety switch.

Travel speed	Forward	Reverse
1st	3.3 km/h 2.1 mph	4.4 km/h 2.7 mph
2nd	6.1 km/h 3.8 mph	8.0 km/h 5.0 mph
3rd L	7.8 km/h 4.8 mph	9.2 km/h 5.7 mph
3rd	10.1 km/h 6.3 mph	13.0 km/h 8.1 mph



STEERING SYSTEM

Palm Command Control System (PCCS) lever controls for all directional movements. Pushing the PCCS lever forward results in forward machine travel, while pulling it rearward reverses the machine. Simply tilt the PCCS lever to left to make a left turn. Tilt it to the right for a right turn.

Hydrostatic Steering System (HSS) is powered by steering planetary units and a hydraulic pump and motor. Counter-rotation turns are also available. Wet, multiple-disc, pedal-controlled service brakes are spring-actuated and hydraulically released. Gear shift lock lever also applies parking brake.

Minimum turning radius
 D85EXi-18 2.0 m **6'6"**
 D85PXi-18 2.2 m **7'3"**



UNDERCARRIAGE

Suspension.....Oscillating equalizer bar and pivot shaft
 Track roller frame Monocoque, large section, durable construction

Rollers and idlers Lubricated

Track shoes

Parallel Link Undercarriage System (PLUS) with lubricated rotating bushings for extended system wear life and lower maintenance costs. Track tension is easily adjusted with grease gun.

	D85EXi-18	D85PXi-18
Number of track rollers (each side)	7	8
Type of shoes (standard)	Single grouser	Single grouser
Number of shoes (each side)	41	45
Grouser height	mm in 72 2.8"	72 2.8"
Shoe width (standard)	mm in 660 26"	910 36"
Ground contact area	cm ² 40260	63340
	in² 6,240	9,820
Ground pressure (tractor)	kPa 59.5	39.8
	kgf/cm ² 0.61	0.40
	psi 8.62	5.77
Track gauge	mm ft.in 2000 6'7"	2250 7'5"
Length of track on ground	mm ft.in 3050 10'0"	3480 11'5"

SPECIFICATIONS



FINAL DRIVES

Double-reduction final drive of spur and planetary gear sets to increase tractive effort and reduce gear tooth stresses for long final drive life. Segmented sprocket teeth are bolt-on for easy replacement. Triple labyrinth protects seals and improves durability.



SERVICE REFILL CAPACITIES

Fuel tank	470 ltr	124.1 U.S. gal
DEF tank	23.5 ltr	6.2 U.S. gal
Coolant	65 ltr	17.2 U.S. gal
Engine.....	38 ltr	10.0 U.S. gal
Damper case	1.6 ltr	0.42 U.S. gal
Torque converter, transmission, bevel gear, and steering system	60 ltr	15.8 U.S. gal
Final drive (each side)		
D85EXi-18	26 ltr	6.9 U.S. gal
D85PXi-18.....	36 ltr	9.5 U.S. gal



HYDRAULIC SYSTEM

Closed-center load sensing system (CLSS) designed for precise and responsive control, and for efficient simultaneous operation.

Hydraulic control units:

All spool valves externally mounted beside the hydraulic tank.
Piston type hydraulic pump with capacity (discharge flow) of 331 ltr/min **87.4 U.S. gal/min** at rated engine rpm.

Relief valve setting 22.6 MPa 230 kg/cm² **3,270 psi**

Control valves:

Spool control valves for SIGMADOZER® or straight tilt dozer

- Positions: Blade lift Raise, hold, lower, and float
- Blade tilt Right, hold, and left
- Rear attachment..... Raise, hold, and lower

	Number of cylinders		Bore
	SIGMADOZER®	Straight Tilt Dozer	
Blade lift	2	2	100 mm 4.0"
Blade tilt	1	1	150 mm 5.9"
Blade angle	1	-	150 mm 5.9"
Ripper lift	2	2	130 mm 5.1"
Pitch angle	45° - 51°	52° - 58°	-

Hydraulic oil capacity (refill): 69 ltr **18.2 U.S. gal**

Ripper equipment (additional volume):

Multi-shank ripper 11 ltr **2.9 U.S. gal**



DOZER EQUIPMENT

Blade capacities are based on the SAE recommended practice J1265.

Use of high tensile strength steel in moldboard for strengthened blade construction.

	Overall Length With Dozer mm ft.in	Blade Capacity m ³ yd ³	Blade Width x Height mm ft.in	Max. Lift Above Ground mm ft.in	Max. Drop Below Ground mm ft.in	Max. Tilt Adjustment mm ft.in	Weight Dozer equipment kg lb	Ground Pressure* kPa kg/cm ² psi
D85EXi-18 Strengthened Single Tilt Power Pitch SIGMADOZER®	5810 19' 1"	7.2 9.4	3575 x 1665 11' 9" x 5' 5"	1225 4' 0"	580 1' 11"	700 2' 4"	4030 8880	80.4 / 0.82 / 11.7
D85PXi-18 Straight Tilt Dozer	6025 19' 9"	5.9 7.7	4355 x 1400 14' 4" x 4' 7"	1240 4' 0"	550 1' 10"	500 1' 8"	3140 6920	45.6 / 0.46 / 6.6

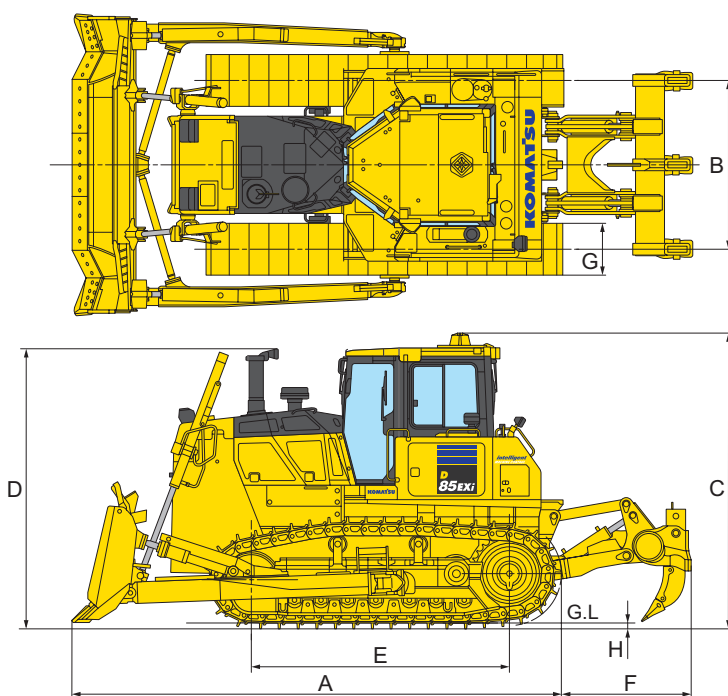
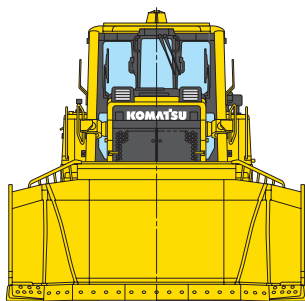
*Ground pressure is based on machine operating weight with blade shown and fixed ripper (EX) or long drawbar (PX)



DIMENSIONS

	D85EXi-18 SIGMADOZER®		D85PXi-18 Straight Tilt Dozer with Long Drawbar	
A	5810 mm	19'1"	6025 mm	19'10"
B	2000 mm	6'7"	2250 mm	7'5"
C	3498 mm	11'6"	3498 mm	11'6"
D	3300 mm	10'10"	3300 mm	10'10"
E	3030 mm	10'0"	3460 mm	11'5"
F	1515 mm	5'0"	-	-
G	660 mm	2'2"	910 mm	3'0"
H	72 mm	2.8"	72 mm	2.8"

Ground clearance 450 mm **1'6"**



Dimension with D85EXi-18 SIGMADOZER single grouser shoe.



OPERATING WEIGHT

Tractor weight:

Including ROPS cab, rated capacity of lubricant, hydraulic control unit, coolant, full fuel tank, operator, and standard equipment.

D85EXi-18 24270 kg **53,506 lb**
 D85PXi-18..... 26210 kg **57,849 lb**

Operating weight:

Including SIGMADOZER® and fixed multi-shank ripper (EXi) or straight tilt dozer and long drawbar (PXi) ROPS cab, operator, standard equipment, rated capacity of lubricant, hydraulic control unit, coolant, and full fuel tank.

D85EXi-18 SIGMADOZER® 30590 kg **67,439 lb**
 D85PXi-18 straight tilt dozer 29520 kg **65,080 lb**