

SPECIFICATIONS



ENGINE

Model Komatsu SAA4D95LE-5*
 Type 4-cycle, water-cooled, direct injection
 Aspiration Turbocharged, air-to-air aftercooled
 Number of cylinders 4
 Bore x stroke 95 mm x 115 mm **3.74" x 4.53"**
 Piston displacement 3.26 ltr **199 in³**
 Governor All-speed, electronic
 Horsepower
 SAE J1995 Gross 60 kW **80 HP**
 ISO 9249 / SAE J1349 Net 58 kW **78 HP**
 Hydraulic fan at maximum speed Net 53 kW **71 HP**
 Rated rpm 2200 rpm
 Fan drive type Hydraulic (reversible for cleaning)
 Lubrication system
 Method Gear pump, force lubrication
 Filter Full-flow

*EPA Tier 3 emissions certified

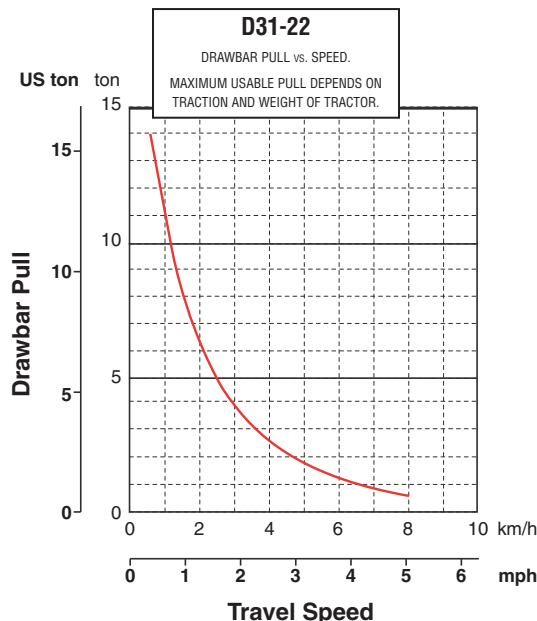


HYDROSTATIC TRANSMISSION

Dual-path, hydrostatic transmission provides infinite speed changes up to 8.5 km/h **5.3 mph**. The variable capacity travel motors allow the operator to select the optimum speed to match specific jobs. Travel control lock lever and neutral switch.

Travel speed (quick shift mode)	Forward	Reverse
1st	0–3.4 km/h 0–2.1 mph	0–4.1 km/h 0–2.5 mph
2nd	0–5.6 km/h 0–3.5 mph	0–6.5 km/h 0–4.0 mph
3rd	0–8.5 km/h 0–5.3 mph	0–8.5 km/h 0–5.3 mph

Travel speed (variable mode)	Forward	Reverse
	0–8.5 km/h 0–5.3 mph	0–8.5 km/h 0–5.3 mph



FINAL DRIVE

Two-stage planetary gear integrated into axial piston travel motors. Compact in-shoe mount reduces risk of damage by debris.



STEERING

Palm Command Control System (PCCS) joystick control for all directional movements. Pushing the joystick forward results in forward machine travel, while pulling it rearward reverses the machine. Simply tilt the joystick to the left or right to make a turn. Tilting the joystick fully to the left or right activates counter-rotation. Hydrostatic Transmission (HST) eliminates steering clutches and brakes, providing smooth powerful turns. Fully electronic control enables smooth control. The PCCS utilizes shift buttons to increase and decrease speed.

Minimum turning radius:
 D31EX-22 2.0 m **6'8"**
 D31PX-22 2.2 m **7'3"**

As measured by track marks on the ground at pivot turn.



UNDERCARRIAGE

Suspension Rigid track frame
 Track roller frame Solid one-piece, thick steel, durable construction
 Rollers and idlers Lubricated track rollers

Lubricated tracks

Unique seals minimize the entry of foreign abrasive material into pin to bushing clearances to provide extended service life. Track tension is easily adjusted with a grease gun.

	D31EX-22	D31PX-22
Number of track rollers (each side)	6	6
Type of shoes (standard)	Single grouser	Single grouser
Number of shoes (each side)	40	40
Grouser height	47 mm 1.9"	47 mm 1.9"
Shoe width (standard)	400 mm 16"	600 mm 24"
Ground contact area	17500 cm ² 2,713 in²	26200 cm ² 4,061 in²
Ground pressure (with dozer, ROPS cab)	46.1 kPa 0.47 kgf/cm ² 6.68 psi	32.3 kPa 0.33 kgf/cm ² 4.69 psi
Track gauge	1510 mm 4'11"	1650 mm 5'5"
Length of track on ground	2185 mm 7'2"	2185 mm 7'2"



COOLANT AND LUBRICANT CAPACITY (REFILLING)

Coolant 18 ltr **4.8 U.S. gal**
 Fuel tank 195 ltr **51.5 U.S. gal**
 Engine oil 11 ltr **2.9 U.S. gal**
 Hydraulic tank 60 ltr **15.9 U.S. gal**
 Final drive (each side) 3.5 ltr **0.9 U.S. gal**



OPERATING WEIGHT (APPROXIMATE)

Tractor weight:

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

D31EX-22 (ROPS cab) 7040 kg **15,521 lb**
 D31PX-22 (ROPS cab) 7320 kg **16,138 lb**

Operating weight:

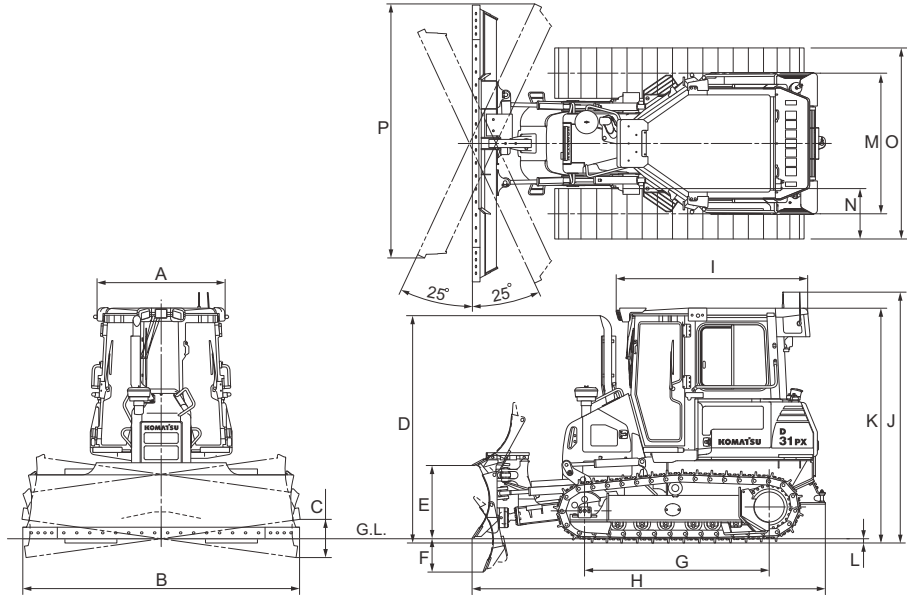
Including PAT dozer, ROPS cab, operator, standard equipment, rated capacity of lubricant, coolant, and full fuel tank.

D31EX-22 (ROPS cab) 8190 kg **18,056 lb**
 D31PX-22 (ROPS cab) 8540 kg **18,827 lb**



DIMENSIONS

	D31EX-22	D31PX-22
A	1280 mm 4'2"	1280 mm 4'2"
B	2550 mm 8'4"	3250 mm 10'8"
B*	—	2875 mm 9'5"
C	350 mm 1'2"	445 mm 1'5"
C*	—	390 mm 1'3"
D	2635 mm 8'8"	2635 mm 8'8"
E	870 mm 2'10"	860 mm 2'10"
F	390 mm 1'3"	380 mm 1'3"
G	2185 mm 7'2"	2185 mm 7'2"
H	4175 mm 13'8"	4155 mm 13'8"
I	2245 mm 7'4"	2245 mm 7'4"
J	2945 mm 9'8"	2945 mm 9'8"
K	2760 mm 9'1"	2760 mm 9'1"
L	47 mm 1.9"	47 mm 1.9"
M	1510 mm 4'11"	1650 mm 5'5"
N	400 mm 16"	600 mm 24"
O	1910 mm 6'3"	2250 mm 7'5"
P	2350 mm 7'9"	2980 mm 9'9"
P*	—	2640 mm 8'8"



* Narrow blade for D31PX-22

Ground clearance:

D31EX-22	315 mm 12.4"
D31PX-22	315 mm 12.4"



HYDRAULIC SYSTEM

Closed-center Load Sensing System (CLSS) designed for precise and responsive control and for efficient simultaneous operation.

Hydraulic control unit:

All spool control valves externally mounted remote to the hydraulic tank. Piston-type hydraulic pump with capacity (discharge flow) of 99 ltr/min **26.2 U.S. gal/min** at rated engine rpm.

Relief valve setting 27.4 MPa, 280 kg/cm² **3,983 psi**

Hydraulic cylinders Double-acting, piston type

	Number of cylinders	Bore
Blade lift	2	75 mm 2.95"
Blade tilt	1	90 mm 3.54"
Blade angle	2	80 mm 3.15"
Blade pitch	1 adjustable linkage	

Hydraulic oil capacity (refilling):

Power angle tilt dozer. 60 ltr **15.9 U.S. gal**

Control valves:

3-spool control valve for power angle tilt dozer.

Positions:

- Blade lift Raise, hold, lower, and float
- Blade tilt Right, hold, and left
- Blade angle Right, hold, and left

Note: Includes one additional spool for fan control.

Additional control valve required for ripper.

Positions:

- Ripper lift Raise, hold and lower



DOZER EQUIPMENT

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

	Overall Length With Dozer*	Blade Capacity (SAE)	Blade Width x Height	Maximum Lift Above Ground	Maximum Drop Below Ground	Maximum Tilt Adjustment	Blade Angle
D31EX-22 PAT Standard Blade	4175 mm 13'8"	1.61 m ³ 2.11 yd³	2550 mm x 840 mm 8'4" x 2'9"	870 mm 2'10"	390 mm 1'3"	350 mm 1'2"	25°
D31PX-22 PAT Standard Blade	4155 mm 13'8"	1.61 m ³ 2.11 yd³	3250 mm x 750 mm 10'8" x 2'6"	870 mm 2'10"	390 mm 1'3"	445 mm 1'5"	25°
D31PX-22 PAT Narrow Blade	4155 mm 13'8"	1.60 m ³ 2.09 yd³	2875 mm x 790 mm 9'5" x 2'7"	870 mm 2'10"	390 mm 1'3"	390 mm 1'3"	25°

* Including hitch