

KOMATSU®

D65EX-18 **D65PX-18** **D65WX-18**

Tier 4 Final Engine
(Serial Numbers 90997 and up)

CRAWLER DOZER



Photos may include optional equipment.

NET HORSEPOWER

217 HP @ 1950 rpm
162 kW @ 1950 rpm

OPERATING WEIGHT

SIGMADOZER®

D65EX-18: 46,892 lb 21270 kg
D65WX-18: 50,618 lb 22960 kg

Straight Tilt Dozer

D65PX-18: 50,331 lb 22830 kg

Power Angle Tilt Dozer

D65EX-18: 50,706 lb 23000 kg
D65PX-18: 51,963 lb 23570 kg
D65PX-18 Wide: 53,925 lb 24460 kg
D65WX-18: 52,801 lb 23950 kg

BLADE CAPACITY

SIGMADOZER®

D65EX-18: 7.3 yd³ 5.6 m³
D65WX-18: 7.7 yd³ 5.9 m³

Straight Tilt Dozer

D65PX-18: 4.8 yd³ 3.7 m³

Power Angle Tilt Dozer

D65EX-18: 5.6 yd³ 4.3 m³
D65PX-18: 5.8 yd³ 4.4 m³
D65PX-18 Wide: 5.8 yd³ 4.4 m³
D65WX-18: 5.8 yd³ 4.4 m³

D65

SPECIFICATIONS



ENGINE

Model.....Komatsu SAA6D114E-6*
 Type..... 4-cycle, water-cooled, direct injection
 Aspiration..... Variable geometry turbocharged, air-to-air aftercooled
 Number of cylinders..... 6
 Bore x stroke..... 114 mm x 144.5 mm **4.49" x 5.69"**
 Piston displacement..... 8.85 ltr **540 in³**
 Governor..... All-speed and mid-range, electronic
 Horsepower
 SAE J1995..... Gross 164 kW **220 HP**
 ISO 9249 / SAE J1349..... Net 162 kW **217 HP**
 Rated rpm..... 1950 rpm
 Fan drive type..... Variable speed hydraulic
 Lubrication system
 Method..... Gear pump, force lubrication
 Filter..... Full-flow

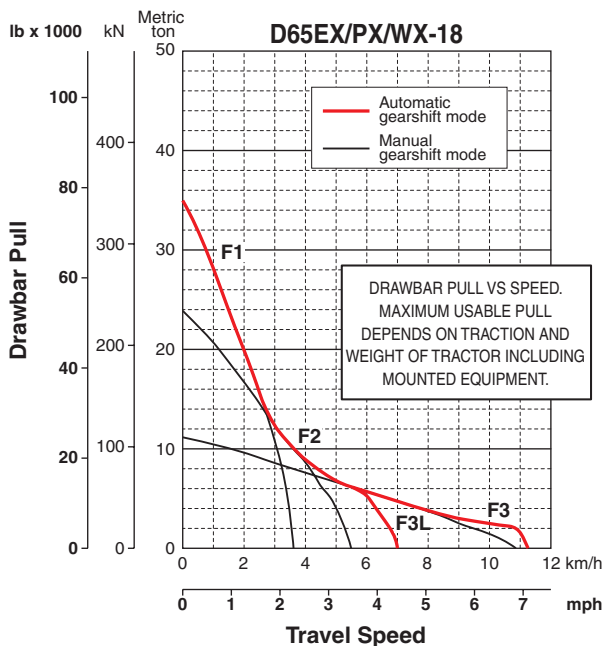
**EPA Tier 4 Final emissions certified



TORQFLOW TRANSMISSION

Komatsu TORQFLOW transmission consists of a water-cooled, 3-element, 1-stage, 2-phase, torque converter with lockup clutch, 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 | 3.7 km/h 2.3 mph | 4.5 km/h 2.8 mph |
| 2nd | 5.6 km/h 3.5 mph | 6.7 km/h 4.2 mph |
| 3rd L | 7.3 km/h 4.5 mph | 8.7 km/h 5.4 mph |
| 3rd | 11.3 km/h 7.0 mph | 13.6 km/h 8.5 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 the left for a left turns, tilt it right for right turns.

Hydrostatic Steering System (HSS) power has been increased 25% by a larger HSS motor, greater hydraulic pump flow, and more engine power while steering. The result is more powerful turns and quicker counter-rotation. Wet, multiple-disc, pedal-controlled service brakes are spring-actuated and hydraulically released.

Gear shift lock lever also applies parking brake.

Minimum turning radius

| | |
|------------------------|--------------------|
| D65EX-18..... | 1.9 m 6'3" |
| D65EX-18 with PAT..... | 2.0 m 6'7" |
| D65PX-18..... | 2.2 m 7'3" |
| D65WX-18..... | 2.1 m 6'11" |



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 a grease gun.

Tractor for outside mounted blade (Straight Tilt, SIGMADOZER®)*

| | D65EX-18 | D65WX-18 | D65PX-18 |
|---------------------------------------|------------------------------|------------------|-------------------|
| Number of track rollers (each side) | 7 | 7 | 8 |
| Type of shoes (standard) | MS PLUS | MS PLUS | MS PLUS |
| Number of shoes (each side) | 42 | 42 | 45 |
| Grouser height | mm in 65 2.6" | 65 2.6" | 65 2.6" |
| Shoe width (standard) | mm in 610 24" | 760 30" | 915 36" |
| Ground contact area (ISO 16754) | cm ² 40910 | 50969 | 66946 |
| | in ² 6,341 | 7,900 | 10,377 |
| Ground pressure (tractor) (ISO 16754) | kPa 44.1 | 38.4 | 29.6 |
| | kgf/cm ² 0.45 | 0.39 | 0.3 |
| | psi 6.4 | 5.57 | 4.29 |
| Track gauge | mm ft.in 1880 6'2" | 2050 6'9" | 2050 6'9" |
| Length of track on ground | mm ft.in 2970 9'9" | 2970 9'9" | 3275 10'9" |

Tractor for inside mounted blade (PAT)*

| | D65EX-18 | D65WX-18 | D65PX-18 | D65PX-18 Wide |
|---------------------------------------|------------------------------|------------------|-------------------|-------------------|
| Number of track rollers (each side) | 7 | 7 | 8 | 8 |
| Type of shoes (standard) | MS PLUS | MS PLUS | MS PLUS | ES PLUS Clipped |
| Number of shoes (each side) | 42 | 42 | 45 | 45 |
| Grouser height | mm in 65 2.6" | 65 2.6" | 65 2.6" | 65 2.6" |
| Shoe width (standard) | mm in 560 22" | 760 30" | 760 30" | 915 36" |
| Ground contact area (ISO 16754) | cm ² 37556 | 50969 | 55605 | 66946 |
| | in ² 5,821 | 7,900 | 8,619 | 10,377 |
| Ground pressure (tractor) (ISO 16754) | kPa 54.7 | 42.1 | 38 | 32.7 |
| | kgf/cm ² 0.56 | 0.43 | 0.39 | 0.33 |
| | psi 7.93 | 6.11 | 5.51 | 4.74 |
| Track gauge | mm ft.in 2050 6'9" | 2230 7'4" | 2230 7'4" | 2385 7'10" |
| Length of track on ground | mm ft.in 2970 9'9" | 2970 9'9" | 3275 10'9" | 3275 10'9" |

*See page 14 for tractor/blade combinations.

MS: Moderate Service shoe, ES: Extreme Service shoe, Clipped: Clipped grouser

SPECIFICATIONS



FINAL DRIVES

Double-reduction planetary gear final drives increase drawbar pull and reduce stresses for longer life. Segmented sprocket teeth are bolt-on for easy replacement. Triple labyrinth housing protects the final drive seals.



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 248 ltr/min **65.5 U.S. gal/min** at rated engine rpm.

Relief valve setting 27.9 MPa 285 kg/cm² **4,050 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



SERVICE REFILL CAPACITIES

| | | |
|--|----------|-----------------------|
| Fuel tank | 415 ltr | 109.6 U.S. gal |
| DEF tank | 23.5 ltr | 6.2 U.S. gal |
| Coolant | 49 ltr | 12.9 U.S. gal |
| Engine..... | 30.5 ltr | 8.1 U.S. gal |
| Torque converter, transmission, bevel gear, and steering system | | |
| | 48 ltr | 12.7 U.S. gal |
| Final drive (each side) | | |
| D65EX-18 non PAT | 16.5 ltr | 4.4 U.S. gal |
| D65EX-18 with PAT | 22 ltr | 5.8 U.S. gal |
| D65PX-18 | 22 ltr | 5.8 U.S. gal |
| D65WX-18 | 22 ltr | 5.8 U.S. gal |

Spool control valves 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
Rear attachment..... Raise, hold, and lower

Hydraulic cylinders..... Double-acting, piston

| | Number of cylinders | Bore | |
|-------------|---------------------|---------------------------------------|------------------------------------|
| | | SIGMADOZER® Straight Tilt Dozer | Power Angle Power Tilt Dozer |
| Blade lift | 2 | 85 mm 3.3" | 90 mm 3.5" |
| Blade tilt | 1 | 125 mm 4.9" | 130 mm 5.1" |
| Blade angle | 2 | N/A | 110 mm 4.3" |
| Ripper lift | 1 | 125 mm 4.9" | 125 mm 4.9" |
| Pitch angle | 1 | 39° - 53° | 52° - 58° |

Hydraulic oil capacity (refill):..... 62 ltr **16.4 U.S. gal**

Ripper equipment (additional volume):

Multi-shank ripper 7 ltr **1.8 U.S. gal**



DOZER EQUIPMENT

Blade capacities per SAE J1265. Moldboard constructed from high tensile abrasion resistant steel.

| | 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* ISO 16754 kPa kg/cm ² psi |
|---|--|---|-------------------------------------|---------------------------------------|---------------------------------------|-------------------------------------|------------------------------------|---|
| D65EX-18 SIGMADOZER® | 5490 18'0" | 5.61 7.34 | 3410 x 1425 11'2" x 4'8" | 1135 3'9" | 500 1'8" | 870 2'10" | 2390 5,260 | 50.0/0.51/ 7.25 |
| D65EX-18 Semi-U Dozer | 5330 17'6" | 5.61 7.34 | 3470 x 1425 11'5" x 4'8" | 1105 3'8" | 430 1'5" | 870 2'10" | 2375 5,236 | 50.0/0.51/ 7.25 |
| D65EX-18 Power Angle Tilt Dozer | 5790 19'0" | 4.25 5.56 | 3870 x 1235 12'8" x 4'1" | 1170 3'10" | 695 2'3" | 500 1'8" | 2960 6,530 | 58.9/0.60/ 8.54 |
| D65PX-18 Straight Tilt Dozer | 5680 18'8" | 3.69 4.83 | 3970 x 1100 13'0" x 3'7" | 1130 3'8" | 535 1'9" | 890 2'11" | 2100 4,630 | 32.8/0.33/ 4.76 |
| D65PX-18 Power Angle Tilt Dozer | 5790 19'0" | 4.42 5.78 | 4010 x 1235 13'2" x 4'1" | 1170 3'10" | 695 2'3" | 520 1'8" | 2990 6,590 | 40.8/0.42/ 5.91 |
| D65PX-18 Wide Power Angle Tilt Dozer | 5790 19'0" | 4.42 5.78 | 4295 x 1188 14'1" x 3'11" | 1170 3'10" | 695 2'3" | 560 1'10" | 3200 7,055 | 35.1/0.36/ 5.10 |
| D65WX-18 SIGMADOZER® | 5500 18'1" | 5.90 7.72 | 3580 x 1425 11'9" x 4'8" | 1135 3'9" | 500 1'8" | 770 2'6" | 2500 5,510 | 43.3/0.44/ 6.28 |
| D65WX-18 Power Angle Tilt Dozer | 5790 19'0" | 4.42 5.78 | 4010 x 1235 13'2" x 4'1" | 1170 3'10" | 695 2'3" | 520 1'8" | 2990 6,590 | 45.2/0.46/ 6.55 |

* Ground pressure shows tractor, ROPS cab, full fluids, operator, standard equipment and applicable blade (EX, WX, PAT with counterweight).
Ground pressure per ISO 16754

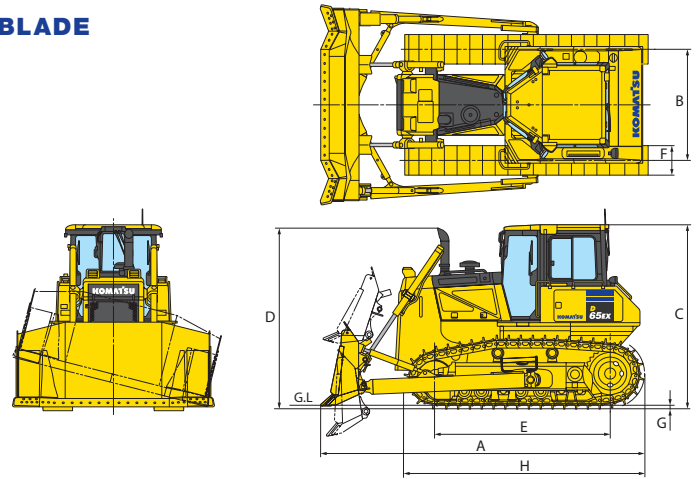


DIMENSIONS — OUTSIDE MOUNTED DOZER BLADE

| | D65EX-18 SIGMADOZER® | D65WX-18 SIGMADOZER® | D65PX-18 Straight Tilt Dozer | |
|---|-------------------------|-------------------------|---------------------------------|-----------------|
| A | 5490 mm 18'0" | 5500 mm 18'1" | 5680 mm | 18'8" |
| B | 1880 mm 6'2" | 2050 mm 6'9" | 2050 mm | 6'9" |
| C | 3160 mm 10'5" ** | 3160 mm 10'5" ** | 3160 mm | 10'5" ** |
| D | 3085 mm 10'1" | 3085 mm 10'1" | 3085 mm | 10'1" |
| E | 2970 mm 9'9" | 2970 mm 9'9" | 3275 mm | 10'9" |
| F | 610 mm 24" | 760 mm 30" | 915 mm | 36" |
| G | 65 mm 2.6" | 65 mm 2.6" | 65 mm | 2.6" |
| H | 4065 mm 13'4" | 4065 mm 13'4" | 4370 mm | 14'4" |

*3350 mm **11'0"** is overall height if Komatsu sweeps are installed.

Ground clearance 415 mm **16"**



Shown with SIGMADOZER® (D65EX-18) single grouser shoe.

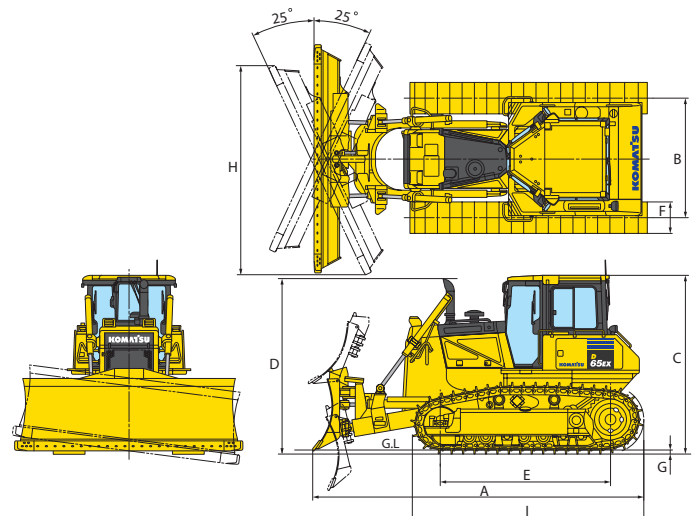


DIMENSIONS — PAT DOZER BLADE

| | D65EX-18 PAT Dozer | D65WX-18 PAT Dozer | D65PX-18 PAT Dozer | D65PX-18 Wide PAT Dozer |
|---|-------------------------|-------------------------|-------------------------|----------------------------|
| A | 5790 mm 19'0" | 5790 mm 19'0" | 5790 mm 19'0" | 5790 mm 19'0" |
| B | 2050 mm 6'9" | 2230 mm 7'4" | 2230 mm 7'4" | 2385 mm 7'10" |
| C | 3160 mm 10'5" ** | 3160 mm 10'5" ** | 3160 mm 10'5" ** | 3160 mm 10'5" ** |
| D | 3085 mm 10'1" | 3085 mm 10'1" | 3085 mm 10'1" | 3085 mm 10'1" |
| E | 2970 mm 9'9" | 2970 mm 9'9" | 3275 mm 10'9" | 3275 mm 10'9" |
| F | 560 mm 22" | 760 mm 30" | 760 mm 30" | 915 mm 36" |
| G | 65 mm 2.6" | 65 mm 2.6" | 65 mm 2.6" | 65 mm 2.6" |
| H | 3545 mm 11'8" | 3627 mm 11'11" | 3627 mm 11'11" | 3925 mm 12'11" |
| I | 4065 mm 13'4" | 4065 mm 13'4" | 4370 mm 14'4" | 4370 mm 14'4" |

*3350 mm **11'0"** is overall height if Komatsu sweeps are installed.

Ground clearance 415 mm **16"**



Shown with Power Angle Tilt dozer (D65EX-18) single grouser shoe.



OPERATING WEIGHT

Tractor shipping weights:

Shipping weight includes blade lift cylinders (C-frame for PAT, plus 840kg c'wt on EX/WX PAT), ROPS cab, standard track, lubricants, coolant.

| | | |
|-----------------------|----------|------------------|
| EX Sigmadozer/SU..... | 18780 kg | 41,403 lb |
| EX PAT..... | 21360 kg | 47,091 lb |
| WX Sigmadozer..... | 20360 kg | 44,886 lb |
| WX PAT..... | 22310 kg | 49,185 lb |
| PX straight..... | 20610 kg | 45,437 lb |
| PX PAT..... | 21950 kg | 48,391 lb |
| PX Wide PAT..... | 22730 kg | 50,111 lb |

Operating Weights:

Operating weight includes blade, hitch, (840 kg c'wt on EX/WX PAT), ROPS cab, standard track, lubricants, coolant, full fuel tank, and operator.

| | | |
|-----------------------|----------|------------------|
| EX Sigmadozer/SU..... | 21270 kg | 46,892 lb |
| EX PAT..... | 23000 kg | 50,706 lb |
| WX Sigmadozer..... | 22960 kg | 50,618 lb |
| WX PAT..... | 23950 kg | 52,801 lb |
| PX straight..... | 22830 kg | 50,331 lb |
| PX PAT..... | 23570 kg | 51,963 lb |
| PX Wide PAT..... | 24460 kg | 53,925 lb |