

Specifications

ENGINE

Model Komatsu SAA6D107E-1
 Common rail direct injection, water-cooled,
 emissionised, turbocharged, after-cooled diesel

Engine power
 at rated engine speed 2.200 rpm
 ISO 14396 99,0 kW / 133 HP
 ISO 9249 (net engine power) 97,0 kW / 130 HP

No. of cylinders 6
 Bore × stroke 107 × 124 mm
 Displacement 6,69 ltr
 Governor All-speed, electronic
 Fan drive type Hydraulic
 Lubrication system
 Method Gear pump, force lubrication
 Filter Full flow

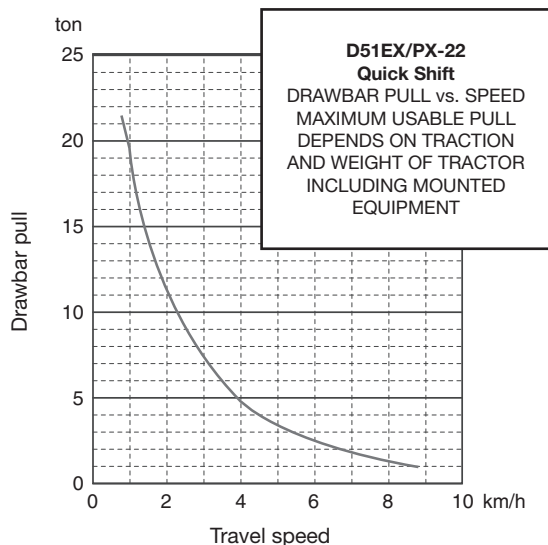
HYDROSTATIC TRANSMISSION

Dual-path, hydrostatic transmission provides infinite speed changes up to 9,0 km/h. The variable capacity travel motors allow the operator to select the optimum speed to match specific jobs. Travel control lock lever and neutral switch.

MAX. TRAVEL SPEEDS

| Quick shift mode | Forward | Reverse |
|------------------|--------------|--------------|
| 1st | 0 - 3,4 km/h | 0 - 4,1 km/h |
| 2nd | 0 - 5,6 km/h | 0 - 6,5 km/h |
| 3rd | 0 - 9,0 km/h | 0 - 9,0 km/h |

| Variable speed mode | Forward | Reverse |
|---------------------|--------------|--------------|
| | 0 - 9,0 km/h | 0 - 9,0 km/h |



FINAL DRIVE

Type Planetary gear, double-reduction
 Sprocket Segmented sprocket teeth
 are bolt-on for easy replacement

STEERING SYSTEM

Type Hydrostatic Steering System (HST)
 Steering control PCCS-lever
 Service brakes Hydraulic dynamic brake, pedal-controlled
 Minimum turning radius (counter-rotation)
 D51EX-22 1,81 m
 D51PX-22 1,89 m
 As measured by track marks on the ground.

UNDERCARRIAGE

Suspension Oscillating equaliser bar and pivot shaft
 Track roller frame Monocoque, large section,
 durable construction
 Tracks PLUS link assembly
 Track tension Combined spring and hydraulic unit
 Number of shoes (each side) 44
 Grouser height (single grouser) 54 mm
 Track rollers (each side) 7
 Carrier rollers (each side) 2
 Shoe width (standard)
 D51EX-22 560 mm
 D51PX-22 710 mm
 Ground contact area
 D51EX-22 30.744 cm²
 D51PX-22 38.979 cm²
 Ground pressure
 D51EX-22 0,41 kg/cm²
 D51PX-22 0,34 kg/cm²

OPERATING WEIGHT (APPR.)

Including PAT blade, steel cab, operator, rated capacity of
 lubricant, coolant, and full fuel tank.
 D51EX-22 12.710 kg
 D51PX-22 13.100 kg

SERVICE REFILL CAPACITIES

Fuel tank 270 ltr
 Radiator 35 ltr
 Engine oil 20 ltr
 Final drive (each side) 4,0 ltr
 Hydraulic tank 63 ltr

ENVIRONMENT

Engine emissions Fully complies with EU Stage IIIA
 exhaust emission regulations

Noise levels
 LwA external 106 dB(A) (2000/14/EC Stage II)
 LpA operator ear 80 dB(A) (ISO 6396 dynamic test)

Vibration levels (EN 12096:1997)*
 Hand/arm ≤ 2,5 m/s² (uncertainty K = 1,32 m/s²)
 Body ≤ 0,5 m/s² (uncertainty K = 0,258 m/s²)

* for the purpose of risk assessment under directive 2002/44/EC,
 please refer to ISO/TR 25398:2006.

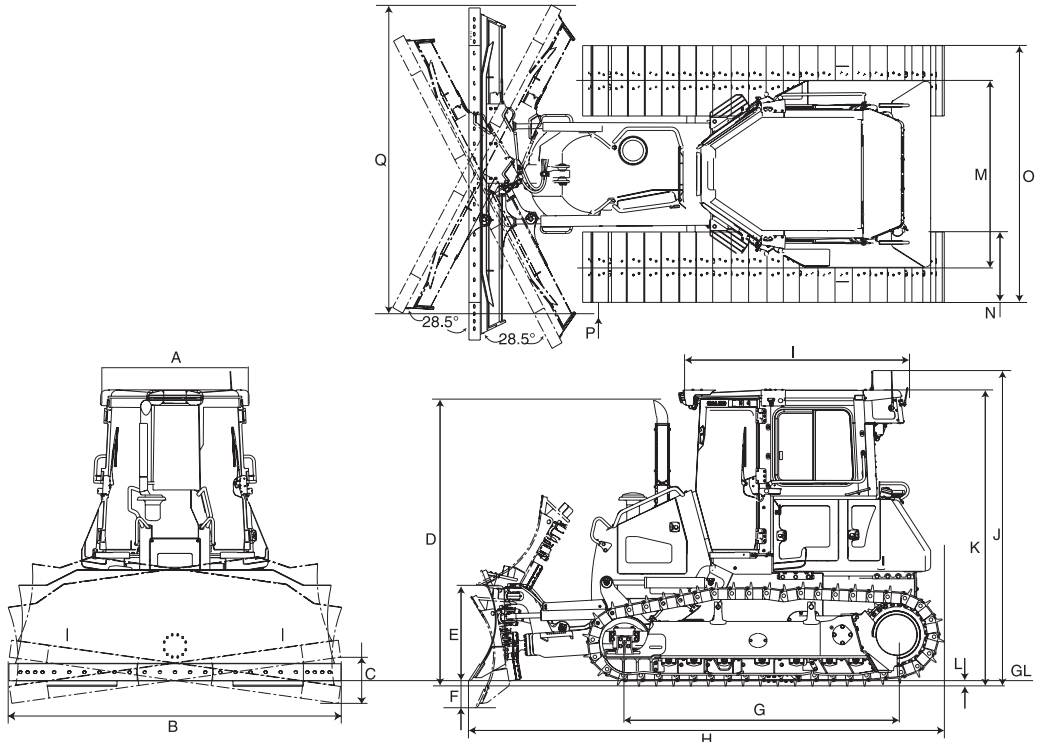
DIMENSIONS

| | D51EX-22 | D51PX-22 |
|-----|----------|----------|
| A | 1.280 mm | 1.280 mm |
| B* | 3.045 mm | N/A |
| B** | 3.350 mm | 3.350 mm |
| C* | 459 mm | N/A |
| C** | 505 mm | 505 mm |
| D | 2.885 mm | 2.885 mm |
| E | 1.107 mm | 1.107 mm |
| F | 461 mm | 461 mm |
| G | 2.745 mm | 2.745 mm |
| H | 4.800 mm | 4.800 mm |
| I | 2.245 mm | 2.245 mm |
| J | 3.177 mm | 3.177 mm |
| K | 2.997 mm | 2.997 mm |
| L | 55 mm | 55 mm |
| M | 1.790 mm | 1.880 mm |
| N | 560 mm | 710 mm |
| O | 2.350 mm | 2.590 mm |
| P* | 4 mm | N/A |
| P** | 136 mm | 16 mm |
| Q* | 2.725 mm | N/A |
| Q** | 2.990 mm | 2.990 mm |

* 2,7 m³ blade (D51EX-22 only)

** 2,9 m³ blade

2,7 m³ blade foldable (D51EX-22 only): transport width 2.550 mm



Ground clearance: 385 mm

HYDRAULIC SYSTEM

| | |
|--|--|
| Type | CLSS (closed-centre load sensing system) |
| All spool valves externally mounted beside the hydraulic tank. | |
| Maximum pump flow | 99 ltr/min |
| Relief valve setting | 274,6 bar |
| Spool control valve positions | |
| Blade lift | Raise, hold, lower, and float |
| Blade tilt | Right, hold, and left |
| Additional control valve positions for ripper | |
| Ripper lift | Raise, hold, and lower |
| Hydraulic cylinders | Double-acting, piston |
| No. of cylinders × bore | |
| Blade lift | 2 × 90 mm |
| Blade tilt | 1 × 100 mm |
| Blade angle | 2 × 90 mm |
| Ripper lift | 1 × 110 mm |

RIPPER EQUIPMENT

| | |
|---|---|
| Multishank ripper | |
| Type | Hydraulically controlled parallelogram ripper |
| No. of shanks | 3 |
| Weight (including hydraulic control unit) | 850 kg |
| Beam length | 1.550 mm |
| Maximum lift above ground | 378 mm |
| Maximum digging depth | 428 mm |

DOZER EQUIPMENT

| | Overall length with dozer | Blade width × height | Maximum lift above ground | Maximum drop below ground | Maximum tilt adjustment | Blade angle |
|--|------------------------------|-------------------------|------------------------------|------------------------------|----------------------------|----------------|
| 2,7 m ³ PAT blade (EX) | 4.800 mm | 3.045 × 1.110 mm | 1.107 mm | 461 mm | 459 mm | 28,5° |
| 2,7 m ³ PAT blade foldable (EX) | 4.800 mm | 3.045 × 1.110 mm | 1.107 mm | 461 mm | 459 mm | 28,5° |
| 2,9 m ³ PAT blade (EX) | 4.800 mm | 3.350 × 1.110 mm | 1.107 mm | 461 mm | 505 mm | 28,5° |
| 2,9 m ³ PAT blade (PX) | 4.800 mm | 3.350 × 1.110 mm | 1.107 mm | 461 mm | 505 mm | 28,5° |

Blade capacities are based on the SAE recommended practice J1265.

Crawler Dozer

D51EX/PX-22

Standard and Optional Equipment

ENGINE AND RELATED PARTS

| | |
|---|---|
| Komatsu SAA6D107E-1 turbocharged direct injection diesel engine | ● |
| EU Stage IIIA compliant | |
| Fuel pre-filter (10 micron) and fuel filter (2 micron) | ● |
| Exhaust pipe with elbow | ● |
| Intake pipe with rain cap | ● |
| Alternator 24 V/60 A | ● |
| Starter motor 5,5 kW/24 V | ● |
| Batteries 200 Ah/2 × 12 V | ● |
| Intake pipe with air pre-cleaner | ○ |

TRANSMISSION AND BRAKES

| | |
|------------------------------------|---|
| Electronically controlled HST | ● |
| Palm lever steering control (PCCS) | ● |
| Quick shift selection system | ● |
| Variable speed mode | ● |
| Reverse speed presets | ● |
| Decelerator pedal | ● |
| Combined inch/brake pedal | ● |

UNDERCARRIAGE

| | |
|--|---|
| Single grouser heavy-duty shoes (EX: 560 mm; PX: 710 mm) | ● |
| Komatsu PLUS link assembly | ● |
| Segmented sprockets | ● |
| Idler cushions | ● |
| Track roller guard, centre and end section | ● |
| Full length track roller guard | ○ |

SERVICE AND MAINTENANCE

| | |
|--|---|
| Swing-out hydrostat-driven radiator fan with reversing function | ● |
| Dry type air cleaner, double element with dust indicator and evacuator | ● |
| Water separator | ● |
| Electronic monitor panel with self-diagnostic function and maintenance display | ● |
| KOMTRAX™ - Komatsu satellite monitoring system | ● |
| Tool kit | ● |

CABIN

| | |
|--|---|
| Air suspension seat: fabric, reclining, high backrest | ● |
| Seat belt | ● |
| High mount footrest | ● |
| Air conditioner | ● |
| Pre radio installation kit (12 V, antenna, loudspeakers) | ● |
| 12 Volt power supply (120 W) | ● |
| Viscous cab mounts | ● |
| Rear-view mirror (inside cab) | ● |
| Wiper front window | ● |
| Wiper rear window | ● |
| Wipers doors | ● |
| Cup holder | ● |
| Lunch box holder | ○ |

HYDRAULIC SYSTEM

| | |
|---------------------------------|---|
| Hydraulics for dozing blades | ● |
| Mono lever blade control | ● |
| Hydraulics for ripper (EX only) | ○ |

LIGHTING SYSTEM

| | |
|---|---|
| Working lights, 3 cab roof front, 1 cab roof rear | ● |
|---|---|

SAFETY EQUIPMENT

| | |
|---|---|
| Steel cab, meets ISO 3471 and SAE J1040, APR88 ROPS standards, as well as ISO 3449 FOPS standards | ● |
| Horn | ● |
| Locks, filter caps and covers | ● |
| Back-up alarm | ● |
| Fire extinguisher | ○ |

ATTACHMENTS

| | |
|-------------------------|---|
| Front pull hook | ● |
| Hitch (not with ripper) | ● |
| Rigid drawbar | ○ |

DOZER EQUIPMENT

| | |
|---|---|
| 2,7 m³ PAT blade (EX) | ○ |
| 2,7 m³ PAT blade foldable (EX) | |
| 2,9 m³ PAT blade (EX) | ○ |
| 2,9 m³ PAT blade (PX) | ○ |
| Multishank parallelogram ripper (EX only) | ○ |
| Komatsu-Topcon machine control systems | ○ |

Further equipment on request

- standard equipment
- optional equipment

Your Komatsu partner:

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