

# KOMATSU

## WA485-11

PRELIMINARY



Wheel loader

**Engine power**  
271 kW / 363 HP @ 1600 rpm

**Operating weight**  
27940 - 28915 kg

**Bucket capacity**  
4.8 - 5.8 m<sup>3</sup>

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# New generation of loader with the power to load more

## Powerful and environmentally friendly

- NEW** • 271 kW EU Stage V engine (+21%)
- Increased engine torque (+66%)
- Reduced fuel consumption (-12%)
- Long-life Komatsu Diesel Particulate Filter
- NEW** • Komatsu Hydraulic Mechanical Transmission (K-HMT)
- NEW** • Komatsu traction control system (K-TCS)
- Massive lifting power and break-out force
- NEW** • Independent control of driveline & work equipment
- NEW** • Auto hill-holding function
- NEW** • Travel speed control dial
- NEW** • Increased uphill driving performance
- High efficiency buckets
- HVO diesel fuel ready

## Total versatility

- Load-Pilot weighing system as standard
- NEW** • Operator Assistance System as option
- Aggregate Handling Specification as option
- Heavy-duty axles
- Special options factory fitted

## Komtrax

- Komtrax Step 5 for ultimate machinery management
- 4G mobile communications including KICSi 2.0 controller
- Current fuel consumption displayed
- Komtrax energy saving report
- Easy maintenance planning
- Machine locating

## First-class operator comfort

- NEW** • Completely remastered cab
- Tinted UV-protection glass
- High-performance air conditioning
- NEW** • New feedback joystick steering system (optional)
- NEW** • New steering wheel
- NEW** • Full digital dashboard
- High comfort seat as option
- NEW** • Improved cab ergonomics
- NEW** • Keyless starting system
- Heated rear window & mirrors

## Safety

- NEW** • High-Definition rear view camera
- NEW** • Rear object detection system
- Remote door opener (switch)
- NEW** • Coloured steps and handrails
- Full LED working lights as standard
- Front step for windshield cleaning
- Large (full) fenders front + rear

## Easy maintenance

- NEW** • Tilttable one-piece engine hood
- Daily service points easily accessible from ground
- Wide core radiator with auto reverse fan
- Factory fitted automatic lubrication system
- NEW** • Extended service intervals
- Komatsu Care program



A maintenance program  
for Komatsu customers



## Powerful and environmentally friendly



### All new Komatsu engine

The newly developed Komatsu engine offers more power and torque at lower speeds, ensuring maximum fuel efficiency and lower engine emissions. Combined with the latest technology and Ultra-Low Ash engine oil, replacing the diesel particulate filter is no longer necessary during the engine's lifetime.

### Excellent serviceability

A powered tilting hood provides full access to the engine compartment. Side doors give quick and convenient access for daily checks and service. Full rear fenders are standard, a gauge on the AdBlue® fill cap minimises overfilling. Servicing costs are remarkably reduced, which provides a lower lifecycle cost.



## First-class comfort



### Ergonomic hydraulic levers

Ergonomically designed control levers support precise work and provide perfect grip when it matters in difficult terrain. The well thought-out design of the control levers enables fatigue-free work.



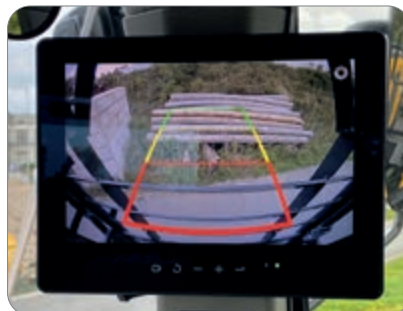
### Angle feedback joystick steering (optional)

The newly developed joystick steering is extremely precise and very easy to use up to 40 km/h. By eliminating the steering wheel, the space in the cabin and the overview of the work equipment are increased.



### Fully digital driver information system

To make things easier for the operator, all important machine information is shown digitally. The new display features high-resolution graphics, which makes it easier to read.



### High definition rear view monitor

The 10 inch rear view monitor provides a crystal clear image for a good overview even behind the machine.



### Handrails in contrasting colours

Handrails in contrasting colours help to identify all holding options on the device.

## Dimensions and performance figures

### Measurements and working specifications

Bucket type		Bucket with raised bottom						Bucket with flat bottom			
		w. teeth	w. BOC	w. teeth	w. BOC	w. teeth	w. BOC	w. teeth	w. BOC	w. teeth	w. BOC
Bucket capacity (heaped, ISO 7546)	m <sup>3</sup>	4.8	5.0	5.1	5.3	5.3	5.5	4.8	5.0	5.1	5.3
Sales code		C86	C87	C76	C77	C12	C13	C66	C67	C62	C63
Material density	t/m <sup>3</sup>	1.87	1.78	1.75	1.66	1.78	1.7	1.87	1.78	1.74	1.66
Bucket weight	kg	2365	2425	2490	2550	2560	2615	2480	2535	2545	2605
Static tipping load, straight	kg	21265	21045	21000	20780	20860	20655	21145	20935	21000	20800
Static tipping load, articulated (40°)	kg	18280	18080	18035	17835	17900	17715	18160	17970	18025	17845
Break-out force, hydraulic	kN	230	220	220	210	215	205	230	220	220	210
Lifting capability, hydr. at ground level	kN	260	260	260	255	255	255	260	260	260	255
Operating weight	kg	27940	28000	28065	28125	28135	28190	28055	28110	28120	28180
Turning radius at corner of tyres (40°)	mm	6275	6275	6275	6275	6275	6275	6275	6275	6275	6275
Turning radius at bucket edge (40°)	mm	7155	7105	7175	7120	7190	7140	7155	7105	7175	7125
a Reach at 45°	mm	1660	1500	1695	1540	1730	1575	1660	1500	1700	1540
b Dumping height at 45°	mm	2885	3020	2850	2980	2815	2945	2885	3020	2845	2980
c Hinge pin height	mm	4480	4480	4480	4480	4480	4480	4480	4480	4480	4480
d Height top edge of bucket	mm	6235	6235	6320	6320	6380	6380	6235	6235	6300	6300
e Digging depth	mm	130	160	130	160	130	160	130	160	130	160
f Max. loading height at 45°	mm	3975	3975	3975	3975	3975	3975	3990	3990	3990	3990
A Overall length, bucket grounded	mm	9635	9455	9690	9505	9875	9690	9635	9455	9690	9510
B Wheel base	mm	3450	3450	3450	3450	3450	3450	3450	3450	3450	3450
C Bucket width	mm	3160	3170	3160	3170	3160	3170	3160	3170	3160	3170
D Width over tyres	mm	2990	2990	2990	2990	2990	2990	2990	2990	2990	2990
E Track width	mm	2240	2240	2240	2240	2240	2240	2240	2240	2240	2240
F Ground clearance	mm	510	510	510	510	510	510	510	510	510	510
H Overall height	mm	3540	3540	3540	3540	3540	3540	3540	3540	3540	3540

All measurements with tyres 26.5 R25 (L3 with -25 mm offset) and standard counterweight (A05).  
 Details of dumping heights and reach to cutting edge or bolt-on cutting edge (BOC) or teeth.

### Change in data caused by:

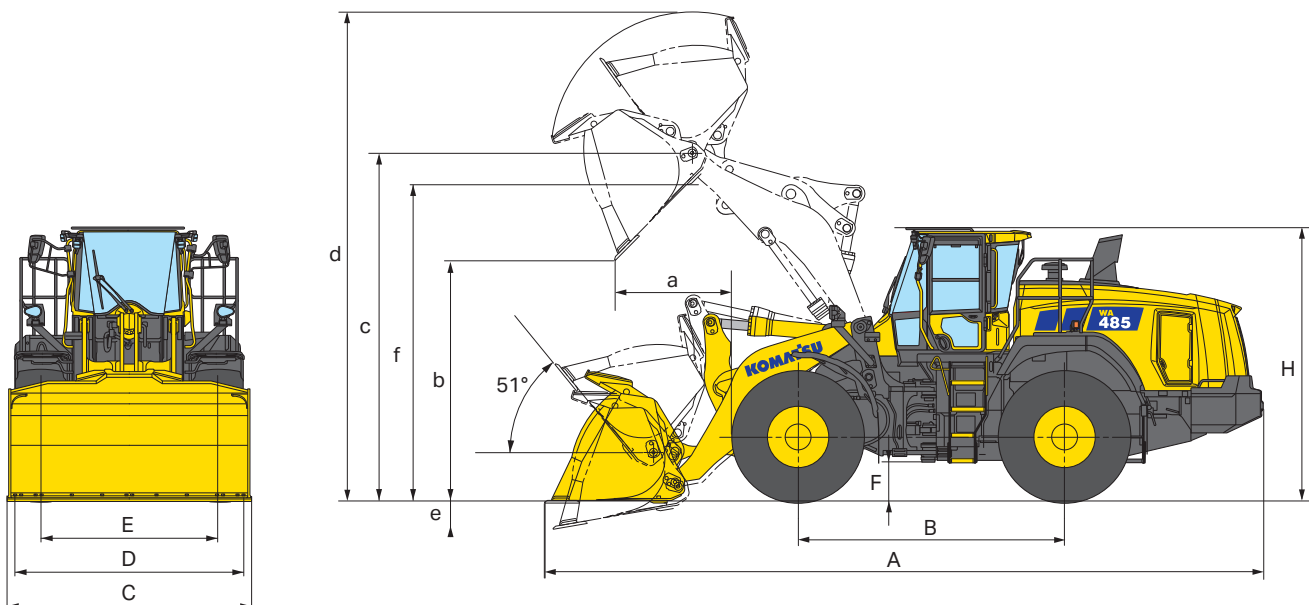
		Without add. counterweight (A05)	Tyres 26.5 R25 L4	Tyres 26.5 R25 L5	Tyres 775/65 R29
Operating weight	kg	+610	+510	+1160	+190
Static tipping load	kg	+1425	+315	+710	+120
Static tipping load, articulated	kg	+1185	+275	+625	+105
Overall length	mm	+135	0	-11	-5
a Reach at 45°	mm	-	-5	-29	-7
b Dumping height at 45°	mm	-	-2	+43	+6
D Width over tires	mm	-	+6	+43	+99
H Overall height	mm	-	-2	+43	+6

# Aggregate handling linkage

## Measurements and working specifications

Bucket type		Bucket with raised bottom		Bucket with flat bottom	
		w. teeth	w. BOC	w. teeth	w. BOC
Bucket capacity (heaped, ISO 7546)	m <sup>3</sup>	5.6	5.8	5.4	5.6
Sales code		C14	C15	C16	C17
Material density	t/m <sup>3</sup>	1.67	1.6	1.73	1.65
Bucket weight	kg	2615	2670	2675	2730
Static tipping load, straight	kg	22095	21895	22070	21870
Static tipping load, articulated (40°)	kg	18915	18735	18890	18705
Break-out force, hydraulic	kN	210	200	210	205
Lifting capability, hydr. at ground level	kN	255	265	255	255
Operating weight	kg	28800	28855	28860	28915
Turning radius at corner of tyres (40°)	mm	6275	6275	6275	6275
Turning radius at bucket edge (40°)	mm	7210	7160	7195	7145
a Reach at 45°	mm	1770	1615	1745	1590
b Dumping height at 45°	mm	2770	2905	2800	2930
c Hinge pin height	mm	4480	4480	4480	4480
d Height top edge of bucket	mm	6380	6380	6380	6380
e Digging depth	mm	130	160	130	160
f Max. loading height at 45°	mm	3975	3975	3990	3990
A Overall length, bucket grounded	mm	9930	9750	9895	9710
B Wheel base	mm	3450	3450	3450	3450
C Bucket width	mm	3160	3170	3160	3170
D Width over tyres	mm	2990	2990	2990	2990
E Track width	mm	2240	2240	2240	2240
F Ground clearance	mm	510	510	510	510
H Overall height	mm	3540	3540	3540	3540

All measurements with tyres 26.5 R25 (L3 with -25 mm offset) and heavy counterweight (A25).  
Details of dumping heights and reach to cutting edge or bolt-on cutting edge (BOC) or teeth.



# Specifications

## Engine

Model	Komatsu DBA127
Type	Common rail direct injection, water-cooled, emissionised, turbocharged, after-cooled diesel
Engine power	
at rated engine speed	1600 rpm
ISO 14396	271 kW / 363 HP
Max. torque / engine speed	2258 Nm / 1100 rpm
No. of cylinders	6
Bore × stroke	127 × 150 mm
Displacement	12.7 l
Fan drive type	Hydraulic, reversible
Alternator	140 A / 24 V
Starter motor	11 kW / 24 V
Filter	Main-flow filter with water separator
Air filter type	Dry-air filter with automatic dust emission and preliminary purification including a dust display
Fuel	Diesel fuel, conforming to EN590 Class 2/ Grade D. Paraffinic fuel capability (HVO, GTL, BTL), conforming to EN 15940:2016

## Transmission

Type	Komatsu Hydraulic Mechanical Transmission (K-HMT)
Max. travel speeds (forwards/backwards) (tyres 26.5 R25)	
Speed range	0 - 38 / 0 - 28 km/h

## Chassis and tyres

System	4-wheel drive
Front axle	Komatsu HD axle, semi-floating (LSD-differential optional)
Rear axle	Komatsu HD axle, semi-floating, 26° swing angle (LSD-differential optional)
Differential	Spiral bevel gear pair
Final drive	Planetary gear in an oil bath
Tyres	26.5 R25

## Brakes

Operating brakes	Hydraulically actuated, wet multi-disc brakes on all wheels
Parking brake	Wet multi-disc
Emergency brake	Uses the parking brake

## Cabin

Two-door SpaceCab™ in conformity with ISO 3471 with ROPS (Roll Over Protective Structure) in conformity with SAE J1040c and FOPS (Falling Object Protective Structure) in conformity with ISO 3449. The air-conditioned pressurised cabin is mounted upon hydrobearings and is noise dampened.
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## Hydraulic system

Type	Komatsu CLSS (Closed Centre Load Sensing System)
Hydraulic pump	Variable piston pump
Working pressure	360 kg/cm <sup>2</sup>
Maximum pump flow	306 l/min
No. of hydraulic/bucket cylinders	2 / 1
Type	Double-action
Bore diameter × stroke	
Boom cylinder	150 × 818 mm
Bucket cylinder	180 × 621 mm
Hydraulic cycle with rated load bucket filling	
Raise time	6.4 s
Lowering time (empty)	3.8 s
Dumping time	1.9 s

## Steering system

System	Articulated frame steering
Type	Completely hydraulic power steering
Steering angle to either side	40°
Steering pump	Variable piston pump
Working pressure	250 kg/cm <sup>2</sup>
Pumping capacity	145 l/min
No. of steering cylinders	2
Type	Double-action
Bore diameter × stroke	95 × 441 mm
Smallest turn (outer edge of the tyre 26.5 R25)	6265 mm

## Service refill capacities

Fuel tank	360 l
Engine oil	41 l
Hydraulic system	132 l
Cooling system	66 l
Front axle	57 l
Rear axle	57 l
Transmission case	40 l
AdBlue® tank	60 l

## Environment

Engine emissions	Fully complies with EU Stage V exhaust emission regulations
Noise levels	
LwA external	107 dB(A) (2000/14/EC Stage II)
LpA operator ear	70 dB(A) (ISO 6396 dynamic test)
Vibration levels (EN 12096:1997)	
Hand/arm	≤ 2.5 m/s <sup>2</sup> (uncertainty K = 2.31 m/s <sup>2</sup> )
Body	≤ 0.5 m/s <sup>2</sup> (uncertainty K = 0.58 m/s <sup>2</sup> )
Contains fluorinated greenhouse gas HFC-134a (GWP 1430). Quantity of gas 1.1 kg, CO <sub>2</sub> equivalent 1.57 t.	