

YANMAR



V100



Operating weight	5 800 kg
Engine power	55,4 kW (74 CV)
Bucket capacity	1,0 - 1,55 m³
Lifting force (arm)	61 kN
Breakout force at bucket edge	55 kN

Multipurpose and economic



STRAIGHT AND RIGID ARTICULATION

For better reliability, for better stability. The wheels forward and backward follow the same way. No damage to the lawns, or pavements. Short turning radius and positioning pallet forks. Less wear on tires



«Z» KINEMATICS

Thanks to its "Z" kinematic system, the V100 picks up loads quickly and precisely with automatic bucket return for maximum visibility.



HYDRAULIC QUICK-HITCH SYSTEM

The quick-hitch system allows the accessories to be easily changed from the cabin with two controls



Lomplies with EU Phase III B / EPA Her 4 final standards, guaranteeing reduced fuel consumption and emissions. The cross-mounted motor allows easy access for maintenance and counterweight.







QUALITY OF COMPONENTS

Components developed in Europe and renowned for their excellent quality. The design and performance of the components make it possible to carry out heavy construction tasks and ensure a long service life.



EASY TO USE

The front axle is pivoted in an electrically proportional manner. Various additional functions are integrated to allow exceptionally precise movements.



Designed to ensure maximum comfort and productivity for the operator, the booths are equipped with a damping system for noise and vibration. They are ROPS / FOPS certified



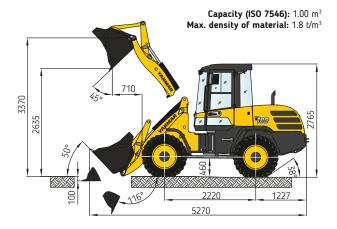
REAR AXLE OSCILLATING

Improved operator comfort, increased machine stability, longer life. The stability of the machine is optimized when using the bucket and forks.





GENERAL-PURPOSE BUCKET

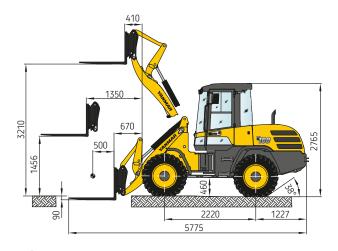


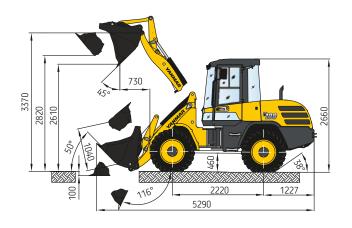
FORK LIFT ATTACHMENT

Operating load over total lift range: 2,400 (2,550*) kgOperating load in transport position: 3,100* kg
*With rear axle weights

MULTI-PURPOSE BUCKET

Capacity (ISO 7546): 0.90 m³ Max. density of material: 1.6 t/m3





BUCKET TYPE

	Contents	Density	Width	Dump height
General-purpose bucket, quick-attach system (QAS), teeth	1,00 m³	1,8 t/m³	1950 mm	2635 mm
General-purpose bucket, QAS, bolt-on cutting edge	1,00 m³	1,8 t/m³	1950 mm	2595 mm
Earth bucket, QAS, teeth	1,10 m³	1,6 t/m³	1950 mm	2585 mm
Earth bucket, QAS, bolt-on cutting edge	1,10 m³	1,6 t/m³	1950 mm	2545 mm
Light-material bucket, bolt-on cutting edge	1,35 m³	1,2 t/m³	2050 mm	2510 mm
Light-material bucket, bolt-on cutting edge	1,55 m³	0,8 t/m³	2200 mm	2485 mm
Multi-purpose bucket, QAS	0,90 m³	1,6 t/m³	1950 mm	2610 mm
Side-dump bucket, QAS, without teeth	0,85 m³	1,8 t/m³	2050 mm	2515 mm
High-tip bucket, QAS, without teeth	1,00 m³	1,2 t/m³	2050 mm	3835 mm
Quarry bucket, QAS	0,90 m³	1,8 t/m³	2050 mm	2610 mm
Compost bucket	1,05 m³	1,8 t/m³	2050 mm	2625 mm

EXAMPLES OF MATERIAL DENSITIESGranite, basalt, sand (damp), gravel (damp), slate: 1.8 - 2.2 t/m3 Topsoil, clay, mineral coal: 1.1 - 1.6 t/m³
Sandstone, gypsum, limestone, soil (damp), sand (dry), gravel (dry): 1.5 - 1.8 t/m3 Wood chips (dry), compost, coke: 0.2 - 1.0 t/m³



SPECIFICATIONS

[OPERATING DATA, STANDARD EQUIPMENT]

Operating weight (ISO 6016)	5 800 kg
Tipping load, straight (ISO 14397-1)	4 370 kg
Tipping load, articulated (ISO 14397-1)	3 860 kg
Total length, bucket on ground	5 270 mm
Total width	1 950 mm
Turning radius at outside bucket edge	4 445 mm
Wheelbase	2 220 mm
Total height (top of cab)	2 765 mm

[ENGINE]

Manufacturer, model	Deutz, TCD 2.9 L4
Туре	Turbo diesel engine with intercooler, exhaust-gas optimised EU Stage III B, EPA TIER IV final
Combustion	4-stroke cycle, Common Rail injection
Number of cylinders	4 in line
Displacement	2 900 cm ³
Net power rating at 2,200 rpm (ISO 14396)	55,4 kW (75 CV)
Max. torque	240 Nm bei 1 600 min ⁻¹
Cooling system	Water

[ELECTRICAL SYSTEM]

Nominal voltage	12 V
Battery	12 V / 77 Ah / 760 A (DIN-EN50342)
Generator	14 V / 95 A
Starter	12 V / 2,6 kW (3,5 CV)
Cold-starting aid	Glow plugs 12 V
Lighting system in compliance with StVZO and European standards, halogen H7 headlamps, 2 working floodlights front	

[POWER TRANSMISSION]

Hydrostatic drive, closed circuit, independent from loader hydraulics. Perfected driving automatics, automatic optimisation and adjustment of drawbar pull and speed. Hydraulic motor power shift providing two speed ranges. Infinitely variable speed control forward and reverse. 4-wheel drive from reduction gear on rear axle via cardan shaft to front axle.

Inch-brake-drive ped		driving and stopping at high rpm.
2 speed ranges:	"Low"	0-6 km/h
	"High"	0-20 km/h
4 speed ranges	"Low"	0-5 / 0-12 km/h
version optional):	"High"	0-16 / 0-36 km/h

[AXLES]

Front: Rigid planetary final drive axle, centre-mounted disc brake. Limited slip-type differential 35%.	
Rear: Oscillating (with cushioning) planetary final drive axle, with integrated reduction gear. Limited slip-type differential 35%.	
Angle of oscillation	± 10°

[BRAKES]

Service brake:	Hydraulically actuated centre-mounted disc brake, acting on all 4 wheels via 4-wheel drive.
Auxiliary brake:	Hydrostatic through closed-circuit travel drive.
Parking brake	Mechanically actuated centre-mounted disc brake on front axle

[TIRES]

Standard 405/70 R 20 SPT9 Dunlop



[STEERING]

Articulated steering, fully hydraulic, 2 steering cylinders with final positioning damping on both sides, oil supply via Load-Sensing priority valve, quick and easy steering even at engine idle-running speed.

Total steering angle 80°

[FLUID CAPACITIES]

Fuel tank	110 l
Hydraulic system (incl. tank)	88 I

[NOISE LEVEL]

Sound pressure level (LpA) in cab	76 dB(A)
Sound power level (LWA) around the machine according to 2000/14/EC	101 dB(A)

[HYDRAULIC SYSTEM]

Pump capacity 76 l/min Working pressure 250 bar

Control unit: Proportional hydraulic valve with 3 control circuits, supplying work functions "Lift / Lower", "Dump / Tilt-back with high-speed control" and "3rd control circuit (1st additional control circuit)". Simultaneous, independent control of all movements.

Hydraulic cylinders: 1 lifting cylinder, 1 tilt cylinder, all dual-action

The thermostatically controlled oil circuit ensures that the oil temperature is promptly reached and avoids overheating. Return filter installed in hydraulic tank allows for eco-friendly replacement of filter elements.

'Fingertip' control for 3rd control circuit, electro-proportional, oil flow limitation via machine

function display, continuous operation. Installation on loader frame incl. couplings.

Hydraulically switchable float position by overdriving the pressure point "Lower" on the joystick, electrically switchable continuous operation function.

Single, four-way control lever (joystick) with integrated direction-of-travel switch and switch for additional control circuit.

[LOADER FRAME]

Loader installation featuring true parallel linkage and integrated mechanical (optionally hydraulic) quick-hitch	system.
General-purpose bucket (ISO 7546)	1,00 m³
Lifting force at ground level (ISO 14397-2)	61 kN
Breakout force at bucket edge (ISO 14397-2)	55 kN

[FORK LIFT ATTACHMENT]

Operating load over the total lift and steering range	2 400 (2 550*) kg
Operating load in transport position, approx. 300 mm above ground level, total steering range	3 100* kg
Width of fork carrier	1 240 mm
Length pallet forks (100 x 40 mm)	1 100 mm
Stability factor	1,25
Operating load determined acc. to ISO 14397-2 and EN ISO 474-3 on level ground = 80 % of tipping load.	

[CAB]

Rubber-mounted full-vision steel cab, ROPS (EN ISO 3471) and FOPS** (EN ISO 3449) certified.

Cab featuring two doors, electric windscreen intermittent wipers and washer (front and rear), tinted panoramic safety glass, sliding window on left-hand side.

Driver's seat MSG85 (standard version) with hydraulic cushioning, weight-adjustable, longitudinal and height adjustment and lap belt in compliance with ISO 7096 and ISO 6683.

Cab heating by engine coolant heat exchanger with 3-speed heater fan (choice fresh air/recirculating air) and windscreen defroster, front and rear.

Steering wheel with height and tilt adjustment

Air conditioning and radio pre-installation

^{*}With rear axle weights

^{**}FOPS-approved only with skylight guard (optional)

[OPTIONS]

TIRES

405/70 R 20 EM 01 Mitas | 360/80 R 20 TRI2 Nokian | 380/75 R 20 XMCL Michelin | 400/70 R 20 XMCL Michelin | 405/70 R 20 MPT E-70 Continental | 405/70 R 20 XZSL Michelin | 500/45-20 J331 Alliance (wide tires) | Non-standard tires available on request

FRONT ATTACHMENTS

General-purpose bucket*: 1,00 m³ | Earth bucket*: 1,10 m³ | Light-material bucket*: 1,35 m³ | Light-material bucket*: 1,55 m³ | Side-dump bucket*: 0,85 m³ | High-tip bucket*: 1,00 m³ | Multi-purpose bucket*: 0,90 m³ | Quarry bucket: 0,90 m³ | Compost bucket: 1,05 m³ | Front ripper with 4 prongs | Fork lift attachment: Fork carrier, 1,240 mm wide | Forks: 1 100 mm, 140 x 50 mm | Forks: 1 200 mm, 140 x 50 mm | Forks: 1 100 mm, 130 x 60 mm, foldable (StVZO approval possible) | Load hook, attachable on fork arms | Load hook, integrated in quick-hitch system | Broom bucket | Snow blade

DRIVER'S STAND

Operator's seat MSG 85 (comfort version), hydraulic damping, extra-high backrest, weight-adjustable, lap belt | Air-cushioned operator's seat MSG 95 (premium version) with orthopedic lumbar support, extra-high backrest, adjustable armrests, headrest, seat and backrest heating | Engine-independent diesel heater with timer Fire extinguisher

DIESEL ENGINE

Diesel engine with diesel particulate filter (DPF) | Guard for fan wheel

HYDRAULIC SYSTEM

4th control circuit, 'Fingertip' control, (electro-proportional control) and installation on lift frame incl. couplings and continuous operation e.g. for attachments with 2 hydr. functions | 4th control circuit, High-Flow, 115 l/min, 180 bar, (electro-proportional control) and installation on lift frame incl. couplings | 4th control circuit, single-acting, 'Fingertip' control, (electro-proportional control) with pressureless return and installation at rear-end | Hydraulic outlet for front hand-held hammer, with flow divider | Open return, on lift frame | Bypass filter Kleenoil

QUICK-HITCH SYSTEMS

Quick-hitch system, hydraulic | Quick-hitch system, hydraulic (Atlas) | Hydraulic installation for hydraulic quick-hitch system

CAB

FOPS-skylight guard | Yellow beacon | Right-hand door with sliding window | Radio installation kit | Working floodlight, Rear | Air-conditioning

OTHER OPTIONAL EQUIPMENT

High-speed version 36 kph | Anti-theft device (immobiliser) | Filling with biodegradable hydraulic oil, esterbased, BIO-E-HYD-HEES | Special slow-motion device available on request | Electrical tank refilling pump | Rear axle weights, approx. 260 kg | Pilot-controlled hose-rupture valves for lift and tilt cylinders | Quick couplers (flat face) for 3rd control circuit on lift frame | Back-up alarm for reverse travel | Ride control system | Central lubrication system | Battery disconnector | Trailer coupling (Rockinger) Acceptance as agricultural or forestry tractor | Manual throttle, transmission deactivated | Further optional equipment available on request





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