YANMAR

V8e

ELECTRIC WHEEL LOADER

Operating weight	4 500 kg
Bucket capacity	0.8 m³ - 1.2 m³
Tipping load with std. bucket - straight/full turn	3 250 kg/2 950 kg
Payload with forks - straight/full turn	2 100 kg/1 800 kg
Machine height	2.49 m
Machine width over tires	1.81 m
Travel speed	Max. 20 km/h
Working hydraulics	Max. 63 lpm, max. 250 bar

TOP PERFORMANCE WITH ZERO EMISSION

OPERATOR'S COMFORT

The V8e is designed to ensure maximum comfort and productivity for the operator. Its all-new cabin features two steel frame doors, a sliding window on the left side, a roof window, an adjustable right armrest, an adjustable steering column, and a comfortable heated seat. LED headlights and LED work lights enhance visibility. The operator-friendly environment ensures a very pleasant working atmosphere.

EASY TO USE

This electric wheel loader is equipped with advanced features that ensure precise, comfortable, and productive operation. Smart control, fingertip control, and a multi-function joystick provide the operator with optimal handling for a highly productive workday.

ELECTRIC MOTORS

The machine is powered by an advanced electric motor, delivering 22 kW of rated power and up to 30 kW at peak for the drivetrain. For hydraulic operations, a second electric motor provides 13 kW of rated power and can reach up to 33 kW at peak. These powerful motors enable the V8e to perform jobs equivalent to those of diesel-powered machines, ensuring robust performance and efficiency in various tasks.

PARALLEL KINEMATICS

Our V8e features a parallel kinematic system that enables quick and precise load handling without the need for constant load angle adjustments. The linkage system and quick-hitch design ensure excellent visibility of the front attachment and fork tines.

ARTICULATED STEERING

Ensuring the rear frame always follows the attachment, meaning short turning radius, optimal positioning and less wear on tires. The attachments can be steered without moving the machine front- or backwards, this helps to adjust the forks position in narrow spaces.

ARTICULATION-OSCILLATION-JOINT

This technology guarantees exceptional stability on uneven terrain by ensuring all wheels maintain contact, while the machine's low height of less than 2.50 m facilitates effortless transportation in a roll-off container.

HYDRAULIC QUICK-HITCH SYSTEM

The quick-hitch system allows the attachments to be easily changed from the cabin with a safe two-handed operation.

FAST AND EASY CHARGING

Yanmar also provides smart solutions to meet the customer expectation in terms of: full day of autonomy (depending on the application) and a simple and fast charging process.

YANMAR GOES ELECTRIC WHY NOT YOU?

ENJOY A QUIETER WORKSPACE

Experience a more comfortable work environment with our electric compact equipment, designed to significantly reduce noise levels. Prioritizing operator comfort without sacrificing performance, our equipment allows you to work peacefully in parks, golf courses, corporate campuses, or inside buildings without causing disturbances.

LOW MAINTENANCE EFFORTS AND COSTS

Say goodbye to frequent maintenance interventions.
Our electric models require significantly less upkeep compared to traditional diesel machines, which translates to substantial savings in both time and money. Electric equipment has fewer moving parts, reducing the likelihood of mechanical failures and the need for repairs. Additionally, the simplified maintenance routines and extended service intervals contribute to making electric models a cost-effective solution for your business in the long run.

ZERO EMISSION

Our electric models produce no harmful emissions, making them an environmentally friendly choice. This zero-emission design not only helps to reduce your carbon footprint but also ensures compliance with stringent environmental regulations and green building standards. The absence of exhaust gas emissions makes these machines ideal for use inside buildings. Embracing electric models supports sustainable practices and demonstrates your commitment to corporate social responsibility.

VERSATILE APPLICATIONS

Adapt to any worksite with ease, as our electric machines are a perfect fit to a wide range of applications. Whether you're dealing with landscaping, construction, or urban maintenance, these models perform just as efficiently as their diesel equivalents. Customize your equipment to ensure optimal performance, tailored to your specific needs. For the V8e and SV17e, a variety of worktools is available, enhancing their versatility.

IMPRESSIVE PERFORMANCE AND AUTONOMY

Our electric machines are designed to deliver a good work autonomy, ensuring they can handle extended operations without frequent recharging. They offer performance on par with diesel models, providing the power and reliability you need for demanding tasks.

SIMPLE AND INTUITIVE CHARGING

Charging your equipment is straightforward and user-friendly, allowing for easy integration into the daily routine of the operator. The electric range from Yanmar supports you in transitioning to an all-electric solution for your projects. We offer a complete, comprehensive solution to accompany your work from start to finish, ensuring seamless operation and efficiency.

Switch to Yanmar's electric construction machines and enjoy the benefits of quieter operations, low maintenance cost, zero-emission, and versatile performance.

THE ULTIMATE MIX OF THE LATEST TECHNOLOGIES

The Yanmar's V8e combines impressive performance and efficiency in spite of its compactness. With the powerful and precisely controllable travel drive, as well as the articulation-oscillation-joint and its boom with excellent parallelism, it can easily handle big tasks.

FEATURING PARALLEL KINEMATICS

The parallel kinematic system enables rapid and precise load lifting without the need for continuous angle adjustments. This advanced system automatically manages the stroke angle, allowing the operator to focus on the precise placement of the load. It significantly enhances efficiency, especially when loading and unloading the second row of a truck, by streamlining work cycles. The intelligent design also ensures that the tilt control lever does not collide with the truck body, thereby enhancing both operational safety and the longevity of the equipment. Moreover, the system's ability to maintain a consistent load angle reduces operator fatigue and improves overall productivity.

INNOVATIVE FEATURES FOR MORE PERFORMANCE

The standard features of this electric wheel loader include a rigid front and rear axle with a 35% automatic locking effect, front oscillation of +/- 10°, and a steering angle of +/- 40°. It is equipped with an electrically actuated SAHR (spring-applied hydraulic release) brake and an electric drivetrain providing all-wheel drive, reaching a maximum travel speed of 20 km/h. Additionally, the Smart Assist Remote 3rd generation telematics provides monitored data tailored specifically for electric machines, enhancing operational efficiency and maintenance.

A COMBINATION OF POWER AND EFFICIENCY

The all-wheel electric drive of the V8e ensures high traction forces and performance. With bucket capacities ranging from 0.8 m³ to 1.2 m³, the V8e offers versatility in handling various materials efficiently. Its impressive payload capacity on forks of 1800 kg facilitates the easy transportation of stone pallets, making it ideal for landscaping and construction tasks. Moreover, with a lifting height of 2.49 m (dump height bucket) or 3.02 m with pallet forks, the V8e excels in loading trucks and material handling applications with ease. The articulation-oscillation-joint (AOJ) technology guarantees exceptional stability on uneven terrain by ensuring all wheels maintain contact, while the machine's low height of less than 2.50 m facilitates effortless transportation in a roll-off container.

SMART CONTROL

The Yanmar Smart Control system offers four work modes–Bucket, Fork, Eco, and Power–tailoring performance to specific tasks.

AUTOMATIC DIFFERENTIAL LOCK

The V8e is fitted with permanent all-wheel drive and automatic self-locking differentials on the front and rear axles (35% locking effect). Both provide enhanced traction when traveling in a straight line and turning corners - perfect for bucket loading.

TRAVEL RIDE CONTROL*

The travel ride control function induces a suspension effect in the boom cylinder thanks to an accumulator. This system improves the drivability of the loader when transporting loads on uneven ground or driving at high travel speed. This feature improves the operator comfort.

AUXILIARY HYDRAULICS

The auxiliary hydraulic system AUX 1 (3rd section -standard) works completely independently of the drivetrain and offers 63 lpm and max. 250 bar. AUX 1 is used for operation of hydraulic quick coupler and common work tools. Additional control circuit AUX 2 (4th section - option) for operation of special attachments, which requires hydraulic oil flow (optional).

TRACTION CONTROL

The automatic traction control ensures that the V8e's wheels do not spin, even on surfaces of varying difficulty such as mud and snow.

RECUPERATION

The V8e also features a recuperation system that increases autonomy while the driver stops to accelerate the machine. The electric motor acts as a generator, converting energy to charge the battery.

CRUISE CONTROL*

This option allows specific travel speed limits to be selected. This is very helpful and practical for various applications such as snow removal, street cleaning or trenching as it allows you to fully concentrate on the work.

*Available as an option.

ELEVATING OPERATOR COMFORT AND EFFICIENCY: THE V8E CABIN

The all-new cabin of the V8e electric wheel loader is designed to enhance operator comfort, safety, and efficiency. Featuring state-of-the-art components and thoughtful ergonomics, the cabin offers an unparalleled working environment for demanding job sites. Key features include advanced visibility, durable construction, and precise control mechanisms, all of which contribute to a superior operator experience.

ALL-AROUND VISIBILITY FOR ENHANCED SAFETY

The V8e cabin boasts all-around visibility, crucial for maintaining safety on job sites. Large windows and a roof window ensure an unobstructed view of the surroundings, optimizing front visibility for faster and safer operation of attachments. This design minimizes blind spots and enhances situational awareness, significantly reducing the risk of accidents.

DURABLE AND FUNCTIONAL DESIGN

Both the left and right doors are seamlessly integrated into the machine's shape, preventing damage during operations. The left-hand side door features a sliding window, providing optimal cabin ventilation and enabling communication from either side. Additionally, the cabin's design simplifies cleaning, ensuring it remains functional and neat even in harsh conditions.

UNMATCHED COMFORT AND PRECISION CONTROL

Operator comfort is a priority with the V8e's adjustable, heated seat, featuring mechanical suspension for customizable support based on position and weight. The adjustable right armrest and steering column further enhance ergonomics. Precision fingertip control allows operators to regulate oil flow accurately, from zero to full, using a thumbwheel on the joystick. This electrical proportional activation of hydraulic functions, combined with the attention to ergonomic detail, significantly improves operator comfort and control.

INTUITIVE CHARGING

PLUG & CHARGE

Charging the V8e is extremely easy. Simply turn off the machine, take the machine key with you, close the cabin, open the charging flap, connect the charging cable to the power supply and connect the Type 2 plug to the charging socket on the left side of the machine.

To stop charging, all you have to do is open the cab, press the switch button below, which is accessible without entering the cab, and then disconnect the Type 2 cable from the machine.

HIGH-CAPACITY BATTERIES FOR EXTENDED OPERATION

The V8e electric wheel loader is designed for long-lasting performance with its robust battery options. Equipped with a standard 39.9 kWh battery, it provides ample power for extended operations. For those requiring even more autonomy, an optional 53.2 kWh battery is available, ensuring the V8e can handle intensive workloads without frequent recharging. This extended battery capacity translates to increased productivity and efficiency on the job site.

EFFICIENT AND VERSATILE CHARGING SOLUTIONS

The V8e electric loader features an on-board fast charger with a standard charge capacity of 11 kW, and an optional upgrade to 22 kW for even faster charging. The included smart charging cable comes with the most common adapters, ensuring compatibility and convenience. With this integrated system, there's no need for an external charger. More charging information can be found in the table below.

[CHARGING & AUTONOMY]

On-board charger with Type 2 socket	11 kW
Autonomy[1]	39,9 kWh useable battery capacity: 3,1 hours V-cycle[2]

		Charging power	39,9 kWh battery capacity (standard)	53,2 kWh battery capacity (optional)
Chargers	11 kW on-board charger (std.)	230 V, 16 A	~ 6,5 hours (20-80% SOC)	~ 9 hours (20-80% SOC)
		400 V, 16 A	~ 2 hours (20-80% SOC)	~ 3 hours (20-80% SOC)
	22 kW on-board charger (opt.)	400 V, 32 A	~ 1 hours (20-80% SOC)	~ 1,5 hours (20-80% SOC)

[1] Depending on the application and operator usage.
[2] Load and carry application, non-stop.

THE ADVANTAGES OF GOING ELECTRIC

LOW NOISE LEVEL

A key advantage of the V8e is its ability to operate silently, revolutionizing urban worksites with minimal noise pollution. Picture conducting construction activities in quiet cityscapes without disturbance! This loader enables operations in sensitive locations like parks, golf courses, corporate campuses, or even indoor environments without causing disruption. Not only does the V8e maintain discretion for surrounding individuals, but its low noise level also significantly enhances operator comfort, enabling prolonged work without fatigue.

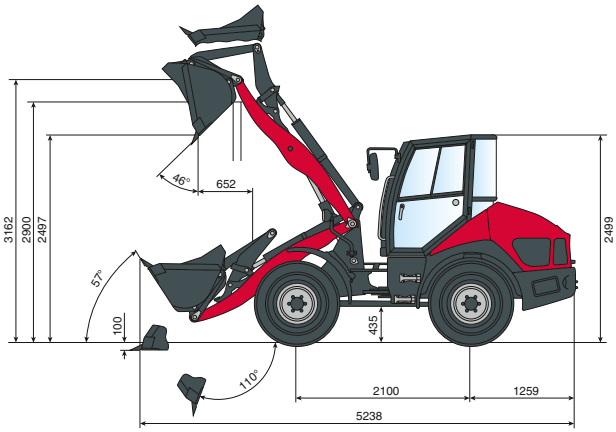
LOW MAINTENANCE COSTS

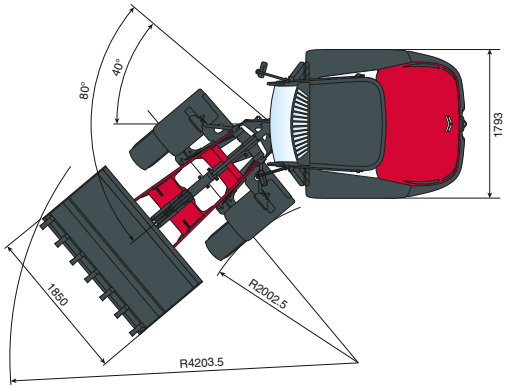
The V8e electric wheel loader is engineered for simplified maintenance and long-term cost efficiency. The innovative electric motors eliminate the need for regular mechanical servicing associated with traditional engines, such as oil changes and exhaust system upkeep. This results in significantly reduced maintenance costs. The user-friendly control panel allows for quick and easy operation, ensuring optimal safety and performance on the job site.

DIMENSIONS

GENERAL-PURPOSE BUCKET

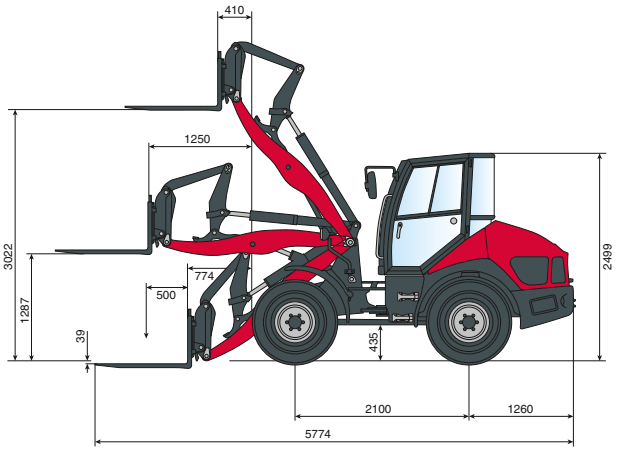
Capacity (ISO 7546): V8e: 0.8 m³
Max. density of material: 1.8 t/m³

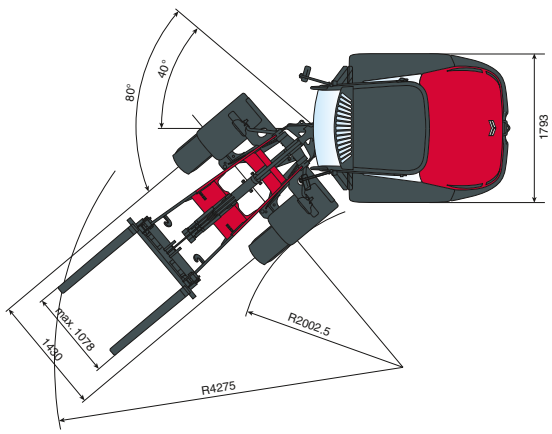




FORK LIFT ATTACHMENT

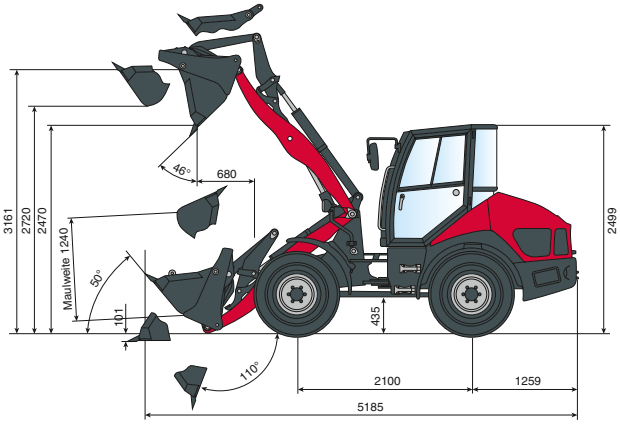
Operating load over total lift range: 1 890 kg
Operating load in transport position: 2 080 kg

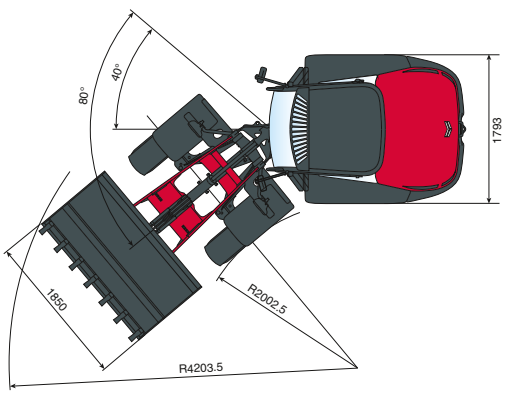




MULTI-PURPOSE BUCKET

Capacity (ISO 7546): V8e: 0.8 m³
Max. density of material: 1.5 t/m³





DIMENSIONS

Overall length	5 238 mm
Wheelbase	2 100 mm
Overall height	2 499 mm
Ground clearance	435 mm
Overall width (outside of tires)	1 793 mm
Overall width (bucket)	1 850 mm
Dumping height (w/o teeth)	2 497 mm
Dumping reach (w/o teeth)	652 mm
Max. hinge pin height	3 162 mm
Max. lifting height	3 020 mm
Digging depth	100 mm
Tilt back angle (at traveling position)	Deg. 57°
Dumping angle	Deg. 46°
Articulation angle	Deg. 40°
Turning radius (track circle)	2 002 mm
Turning radius (bucket circle)	4 203 mm

BUCKET TYPE

	Capacity	Density	Width	Dump height
Loading bucket with teeth	0,8 m³	1,8 t/m³	1 850 mm	2 495 mm
Loading bucket with bolt-on cutting edge	0,8 m³	1,8 t/m³	1 850 mm	2 455 mm
Multi-purpose bucket with teeth	0,8 m³	1,5 t/m³	1 850 mm	2 470 mm
Multi-purpose bucket with bolt-on cutting edge	0,8 m³	1,5 t/m³	1 850 mm	2 440 mm
High-tip bucket, specific weight 1.2 t/m³	0,7 m³	1,2 t/m³	1 850 mm	3 480 mm
Light-material bucket with bolt-on cutting edge	1,0 m³	1,4 t/m³	1 850 mm	2 380 mm
Light-material bucket with bolt-on cutting edge	1,2 m³	1,1 t/m³	1 950 mm	2 340 mm
Side-dump bucket, without teeth	0,7 m³	1,8 t/m³	1 850 mm	2 395 mm
Stone / quarry bucket, distance between tines 80 mm	0,7 m³	1,8 t/m³	1 850 mm	2 475 mm
Bucket with grapple and bolt-on cutting edge	0,95 m³	1,2 t/m³	2 000 mm	2 400 mm

SPECIFICATIONS

STANDARD EQUIPMENT
[ELECTRICAL SYSTEM]

Battery type	Lithium-Ferrum-Phosphate (LFP)
Battery voltage	48 V
Battery capacity	39,9 kWh/53,2 kWh
Charging power	11 kW/22 kW
Machine charging socket	Type 2
Motor power drivetrain	22 kW rated/28 kW peak
Motor power working hydraulics	13 kW rated/33 kW peak
Nominal voltage and capacity	12V/48 Ah
Battery main switch under the machine hood	

[HYDRAULIC SYSTEM]

Pump capacity - pressure	63 l/min - 250 bar

Proportional hydraulic valve four-way control lever (joystick) for the operation of the lift and tilt cylinders with integrated direction-of-travel and speed range button. Hydraulic operated quick coupler incl. 3rd additional control circuit provided as standard.

Hydraulic cylinders: 1 lifting cylinder, 1 tilt cylinder, 1 steering cylinder, all dual-acting.

Hydraulically switchable float position by overdriving the pressure point « lower » on the joystick.

Single, four-way control lever (joystick).

Controller, direction-of-travel switch and switch for additional control circuit.

[CABIN]

Rubber-mounted full-vision steel cab, ROPS, FOPS. Cabin with two doors. Sliding window on left-hand side.

Mechanical comfort seat - fabric, high backrest, heating (12V) (MSG 285/722).

Steering wheel with height and tilt adjustment, adjustable right armrest.

Orange seatbelt.

Intermittent wipers and washer (front & rear).

Panoramic safety glass.

Electric cab heating with three stages and 3-speed heater fan. Windscreen defroster front & rear.

Radio pre-installation.

[LIGHTING]

Lighting system in compliance with StVZO and European standards. LED headlamps in the front and LED rear lights. 2 LED working floodlights in the front as standard. Up to two LED working floodlights in the back as option.

SPECIFICATIONS

STANDARD EQUIPMENT
[DRIVE TRAIN AND TIRES]

Rigid front and rear axle (35% automatic locking effect), front oscillating +/- 10°, steering angle +/- 40°.

Electric drivetrain, max. 20 km/h travel speed.

Central wet disc brake on front axle acting on all four wheels via four-wheel drive.

Electrically actuated SAHR (spring applied hydraulic released) brake.

Tire dimension 340/80-18", machine width over std. tires 1 810 mm.

[PERFORMANCE]

Travel speed	0-20 km/h
Static tipping load, straight	3 250 kg
Static tipping load, full turn	2 950 kg
Payload on forks straight in transport position	2 080 kg
Payload on forks, full turn	1 890 kg
Breakout force (bucket)	41 kN
Traction force	34 kN
General purpose bucket (ISO 7546)	0,80 m³
Gradeability	28°
Noise level	LwA = 85 dB(A)/LpA = 72 dB(A)

[VIBRATION VALUES IN COMPLIANCE WITH DIRECTIVE 98/37/EEC & EN474]

Effective values of acceleration below for entire body 0.5 m/s²

And for upper limbs 2.5 m/s²

[MAINTENANCE FREQUENCY]

Change hydraulic oil	1 000h
Change cooling fluid	according to demand (at least all 2 years)

[MISCELLANEOUS]

3-years/3 000 hours extended warranty according to Yanmar Y-Care terms & conditions.

SmartAssist Remote.

Multifunction 3,5" display/Smart Control: the driver can adjust the machine exactly to the environment, operation, and individual specific requirements.

SPECIFICATIONS

[OPTIONAL EQUIPMENT]

PERFORMANCE
Increased battery capacity of 53,2 kWh | On-board fast charger up to 22 kW | Cruise control.

HYDRAULIC SYSTEM
AUX 2 (4th control circuit, front) | Continuous flow operation for AUX 1 & AUX 2 (3rd and 4th hydraulic control circuit) | Pressure relief valve for AUX 1 (3rd control circuit) | Travel ride control | Open return, on lift frame | Leak-oil line, on lift frame | Biodegradable hydraulic oil | Bypass filter.

CABIN
Seat MSG 95, premium version, air-suspended seat, fabric, high backrest, heating (12V), lumbar support | Headrest suitable for comfort and premium version | Arm rest, left, for driver's seat | Radio MP3.

TIRES
Goodyear Powerload 365/70 R18 | Goodyear Powerload 405/70 R18 | Michelin Bibload 400/70 R18 | Nokian TRI 2 340/80 R18 | Michelin XMCL 340/80 R18 | Alliance J331 500/45 - 20 | Spare tires.

SAFETY
Orange seat belt with electric seat belt buckle | LED rotating beacon, yellow | LED working floodlight, rear (2 pieces) | Anti-theft device, coded key | Immobilizer, electronic, keypad operation | Back-up alarm for reverse travel | Safety valves for lift and tilt cylinders | Load warning device, visual and acoustic.

COUPLERS
Trailer coupling (Rockinger) | Trailer coupling, ball hitch | Socket, front, 13-pole | Socket, rear, 13-pole.

MISCELLANEOUS
Central lubrication system | Outside rear-view mirror, heatable.

SPECIAL PAINT
LIFTING FRAME - Lifting frame and linkage, only 1 RAL colour | FRAME - Front and rear frame, rear counterweight, only 1 RAL colour | HOOD - Cabin covers and engine hood, only 1 RAL colour | RIMS - Rims, only 1 RAL colour for all 4 rims.

For further options, please, contact your local dealer.

Yanmar Compact Equipment EMEA

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