

BUCHER
municipal

Bucher CityCat VR50 Bucher CityCat VR50e

Performance package in the compact class



Bucher CityCat VR50 & Bucher CityCat VR50e

The Bucher CityCat VR50 and VR50e are setting a new standard for compact sweepers with their unique design and pioneering technology. These mid-sized road sweepers provide the best of both worlds; maneuverable dimensions combined with heavy-duty suction performance, pulled or pushed brush system and four-wheel steering - an ideal combination for sweeping urban areas where large hopper capacity and compact agility are equally important.



High performance **and productivity**

The Bucher CityCat VR50 and VR50e deliver on performance. They have the appetite of a large truck mounted sweeper, the functionality of a multi-purpose vehicle and the manoeuvrability of a compact sweeper; all delivered in a single package, designed and built to the exacting standards required by demanding municipal environments.

The all-electric Bucher CityCat VR50e is powered by a 137 kWh Bucher Battery Pack which provides the autonomy to fulfill a full 10-hour shift.

On the Bucher CityCat VR50, power is supplied by a potent 118 kilowatt diesel engine with AdBlue additive and an exhaust after- treatment system which allows the Bucher CityCat VR50 to meet the strict Euro 6 emissions standard.

Heavy-duty suction power and a high payload are combined with a four-wheel steering system as standard, to provide capacity and agility without compromise. Comfortable in heavy-duty cleansing environments and crowded streets, the Bucher CityCat VR50 and VR50e easily clean urban areas.

With the 5.6 m³ hopper, and an optional water recirculation feature, the Bucher CityCat VR50 and VR50e achieve increased on-station working and reduces 'tip runs', enhancing productivity and reducing running costs.

The two side brushes in combination with a 3rd brush have a maximum sweeping width of 3768 mm. The sweeping system can be hydraulically moved 400 mm laterally to the left or right-hand side of the sweeper.

BBP

Specially designed Bucher Battery Pack tailored to the Bucher CityCat VR50e

Low fuel consumption

According to EN 15429-2 standard

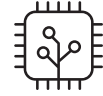
Class leading turning circle

5900 mm kerb to kerb


High payload

Up to 4700 kg at 10 500 kg GVW (dependent on configuration)


The Bucher CityCat VR50 & VR50e deliver




Smart-Con
Multi-functional armrest with smart start function combined with 4.3 inch driver display




Hopper
5.6 m³ hopper volume with high dump option




CSense display
10.1 inch touch display with intuitive design for extended functions and information




Steering
Hydrostatic controlled four-wheel steering




Water tanks
Optimised moulded design with easy removal for maintenance



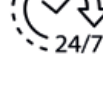
Pick up system
Pulled brush system with suction intake in front of axle, hydraulically laterally movable




Steel hydraulic pipes
Up to 60 % less hydraulic hoses than other sweepers in this class




Water volume
880 l water capacity




Disc brakes
Front axle with dual calipers, rear axle with single calipers



Water recirculation
Service water is filtered and fed to the suction intake



Electric drive
Can switch seamlessly from forward to reverse and work mode/transit



Battery isolator switch
Allows safe working and prevents an accidental discharge



4 wheel steering 3rd brush 5.6 m³ Hopper 137 kWh Bucher Battery Pack Wide suction intake 118 kW, Euro 6 emission diesel engine

Low environmental **impact**

Electric drive

With our all-electric Bucher CityCat VR50e sweeper, sustainability remains a key focus. Bucher Municipal has specially created a custom-designed Bucher Battery Pack that's tailored to the sweeper. This proven technology subjects minimal footprint to the environment and achieves low noise emissions.

Low water usage

The Bucher CityCat VR50e uses a recirculation system to reuse the water inside the hopper. This reduces refilling costs and extends on-station time.

Dust emissions

EUnited 4 star certified for PM2.5 and PM10.

Low fuel consumption with EcoELS

Through the intelligent EcoELS engine and hydraulic management system, the Bucher CityCat VR50 can provide a high energy efficiency, high performance and low noise, resulting in optimum fuel consumption. The concept considers the performance requirements of the operator and external influences such as sweeping mode or driving uphill, automatically delivering the amount of power needed for the task, without derating the optimal operating point. Comparison tests have shown a reduction of diesel consumption between 25-30 % and a reduction of noise level of 20 %.

Less CO2 emissions

With its low fuel consumption in work mode, the Bucher CityCat VR50 produces only half as much CO2 emissions per year as other sweepers in its class (per year = 2000 operating hours).

HVO / Bio diesel B7 compatible

HVO (Hydrotreated Vegetable Oil) has the equivalent productive output as diesel but with none of the harmful properties. It burns cleaner and produces significantly lower damaging emissions, with up to 90 % less Carbon Dioxide (CO2) and 30-70 % less NOX (nitrogen oxides). A non-fossil fuel, HVO can be used 100 % or with any EN590 diesel mix without modification or change in servicing requirements.

High dust suppression

Water jets on each brush provide a fine clean water spray to trap dust particles lifted by the two (optional three) brushes. In addition, recycled water from the hopper is filtered and fed into the suction intake.

Latest regulation engine

Standard Euro 6 engine - with diesel particulate filter, SCR and AdBlue system.

Bucher Connect

Enables a reduction of energy cost while increasing productivity.

Euro 6

Bucher CityCat VR50 with the latest emission standard diesel engine

Bucher Battery Pack

Zero emission

PM2.5 and PM10

EUnited 4 star certified



Safety and comfort

Bucher Municipal is dedicated to achieving the highest productivity from its sweepers. We believe enhanced operator comfort and safety directly relate to productivity and equipment performance. That is why our sweepers are designed to give the best driver comfort and ease of operation, as well as providing a safe work environment for the driver and for third parties.



- 1 Three person cab with two full value seats and additional 3rd folding seat, offering a comfortable and safe experience

2 Middle console with USB plug, cup holders, phone holder and an optional air-cooled compartment

3 Intuitive, one-handed operation of the sweeper via an adjustable multi-function armrest allowing sweeping to start with the push of button
- 4 4.3 inch display for overview of all automotive information, as well as setting feedback which pops up

5 Storage compartments underneath the seats as well as various storage nets provide space for all important belongings

6 Gas spring-loaded steering column, adjustable in rake and reach for a tailored set-up
- 7 Slim center console with 10.1-inch touch display that enables advanced settings and diagnostics of the vehicle

8 Low-energy LED lights to illuminate the sweeping area, ensuring a safe view and visibility for third parties

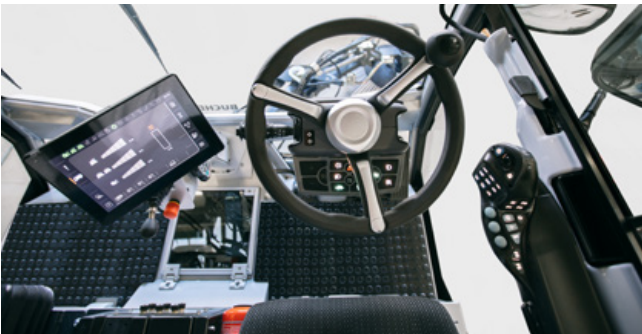
9 Excellent all-round view due to the continuous windscreen, all-glass doors and the two lower windows



Smart-Con armrest
Multi-functional armrest with smart start function makes it possible to operate all working functions with one hand.



Smart-Con driver display
All relevant information and pop-up feedback at a glance at any time thanks to the digital 4.3 inch display.



Cabin
Walk through cab with clear side vision and big wind-screen. Easy reach/use control panels positioned to the front and side of the operator.



CSense display
10.1 inch touch display with intuitive design for extended functions, central overview of all settings and visual diagnostic system. The displayed vehicle set-up can be individually chosen by the driver.



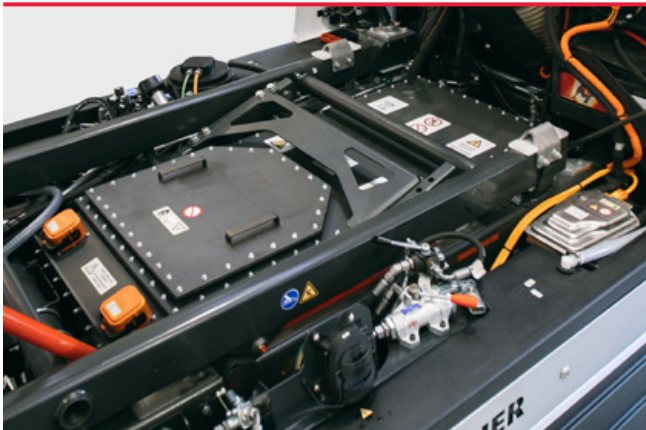
Operator safety
Automatically engaged mechanical hi-vis body prop.



Control panel on the steering column
The control panel contains all driving relevant buttons, easily and quickly accessible.

Low cost of ownership

- Water recirculation system reuses the service water from the hopper and feeds this to the suction intake to minimize fill-ups and maximize-on station time.
- Disc brakes on both axles are self-adjusting and reduce service time.
- Energy-saving LED Lights offer more powerful lighting while significantly reducing the number of times bulbs require replacement.
- The Bucher CityCat VR50 is specifically made for urban and city sweeping, featuring an engine and drive train tailored for fuel efficiency.
- Reduced number of greasing points with autolube option to save on servicing costs.
- Vulnerable nodes and electronic components protected up to IP69 standard and additional covers reduce risk of water ingress further.
- CSense display with full on-board diagnostics for easy fault finding and reduced downtime.
- Steel hydraulic pipes replace flexible hoses to reduce chaffing and premature hose wear.
- Hopper manufactured out of stainless steel for protection against corrosion and wear.



Specially designed Bucher Battery Pack with superior lifetime and minimal memory effect. Made with high quality automotive prismatic Li-ion NMC cells, managed through an automotive battery management system, the battery is placed in a shock, water and dust-proof case. The Bucher Battery Pack is maintenance-free and has a sophisticated repair concept for maximum safety. Due to the electric drive concept of the sweeper, maintenance and service costs in general are kept low.

Bucher Connect
GO / GO+ /
BASE / PLUS / MAX

Hydraulic
Optimized design for
less maintenance

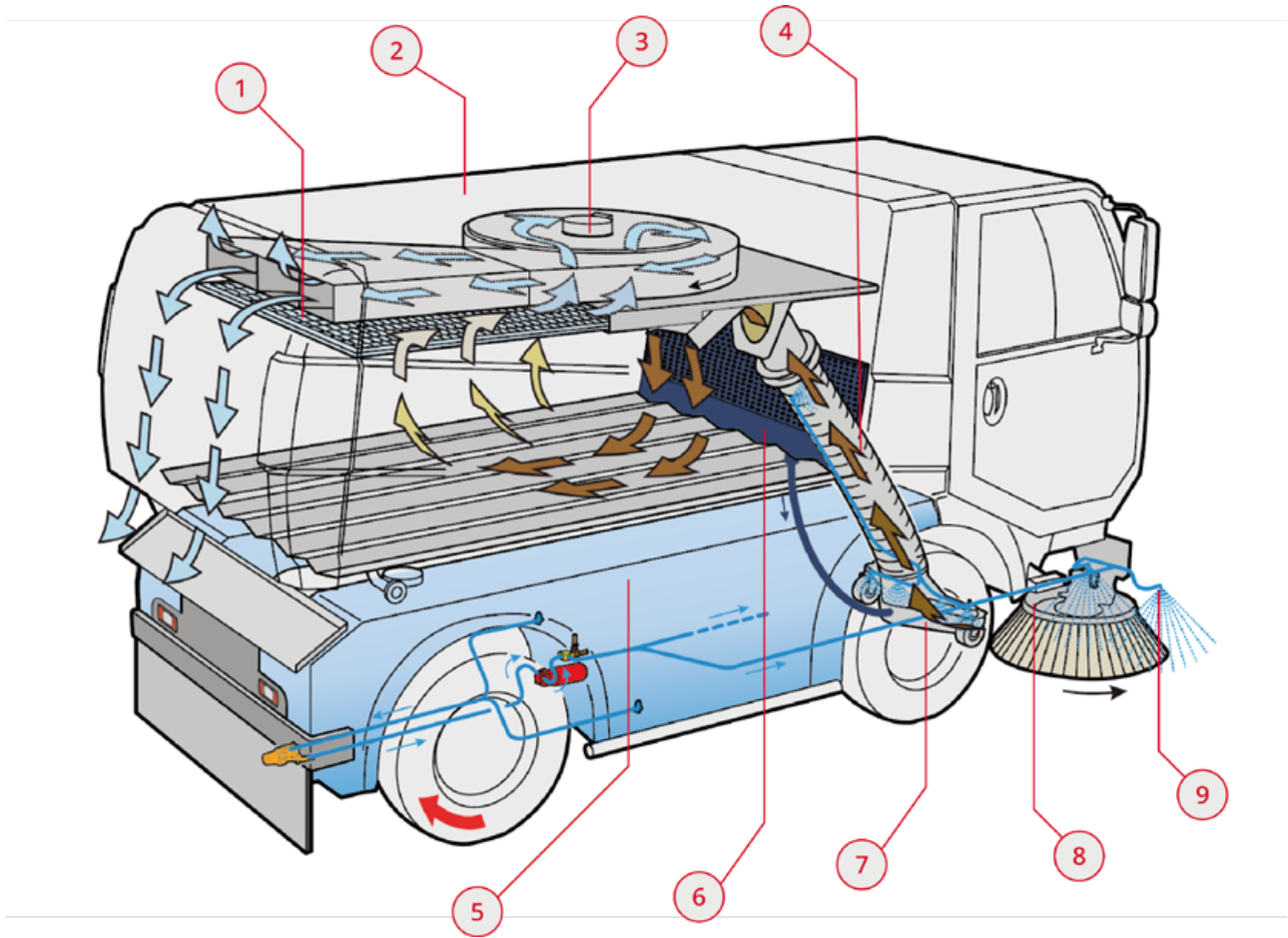
Fan
Heavy-duty fan with
wear resistant blades

LED lights
Energy-saving
yet powerful



Sweep and suction system

High productivity starts with the interaction of driver and equipment. The sweeping system combined with a large water and hopper volume are the basis for achieving this goal. The pulled brush system with 400 mm lateral adjustment is easy to manoeuvre so the driver can focus on the road and the optional 3rd brush.



- | | | |
|---|---|---|
| 1 Large, easy to clean mesh inside the hopper to prevent clogging by leaves | 4 Bucher DNA straight suction hose with water nozzles for dust suppression | 7 Wide 800 mm suction intake, laterally adjustable |
| 2 Large 5.6 m ³ hopper with water recirculation system | 5 Big 880 l fresh water volume with tank placement for a low point of gravity | 8 Pulled brush system, whole system laterally adjustable |
| 3 Fan arrangement on top of the hopper for optimal air flow | 6 Recirculation system which feeds the service water directly to the suction intake | 9 Water nozzles for maximum dust suppression, adjustable from cab |

Significant options



Road construction brush
The road construction front brush is suitable for particularly tough applications, including road construction and weed removal. Furthermore, it has a floor support pressure regulation and a tilt.



DC fast charging
With the CCS Combo 2 fast charging mode, the sweeper can be charged within 1.5 - 2 h with up to 70 kW.



Deluxe driver and passenger seats
Air-suspended seats with back-friendly design, heated seats, automatic weight adjustment and various other adjustment options for greater safety and comfort.



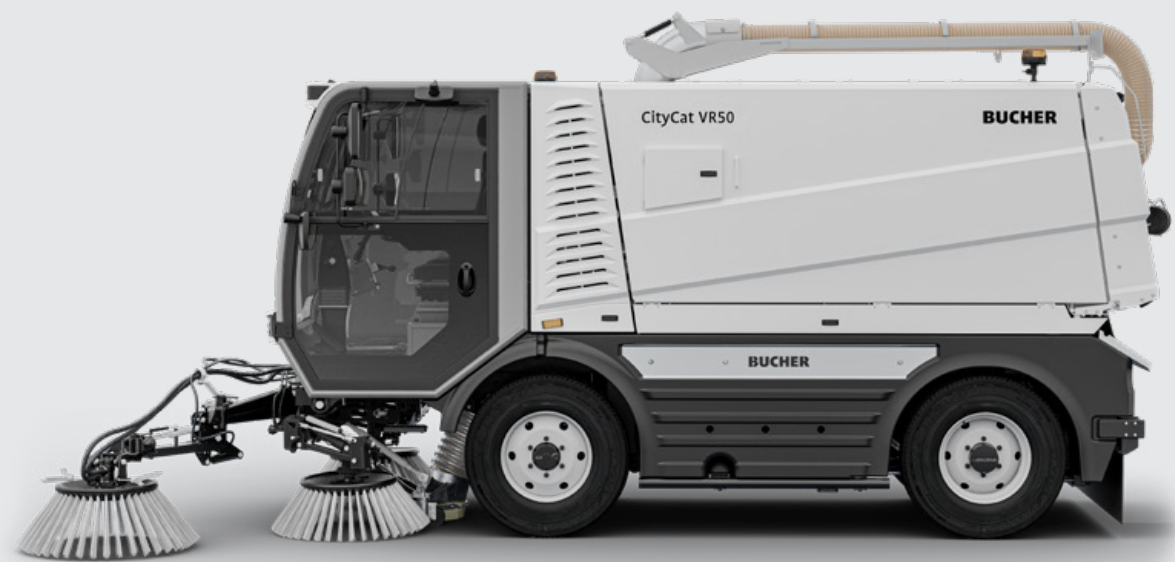
Pushed sweep gear
The pushed brush system features independently controllable brushes and an optional tilt function to ensure unparalleled sweep performance.



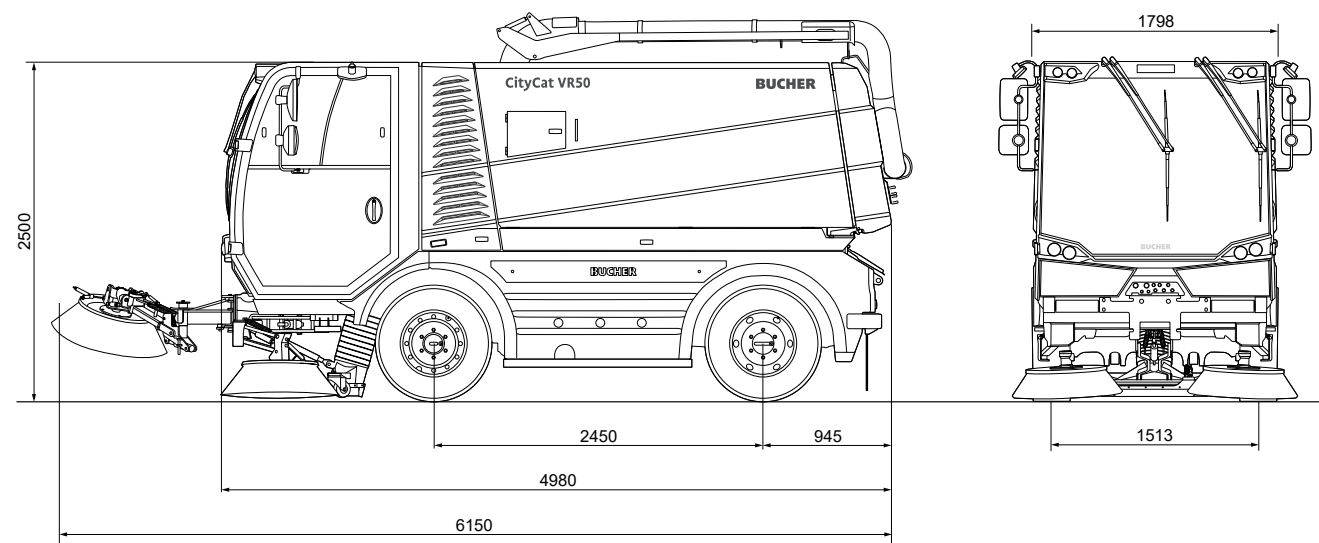
Wanderhose
The wanderhose with hydraulic support enables cleaning of underfloor containers up to 2 metres deep. The abrasion resistant, 360° rotatable suction hose has a diameter of 200 mm with a length of 6.5 m.



Speed variants
Vehicle version with maximum of 80 km/h ensures that cleaning operations can be fulfilled even on motorways.



Bucher CityCat VR50 configuration



Dimensions

Length	4980 mm
Width	1798 mm
Height	2500 mm
Wheelbase	2450 mm
Track width	1513 mm
Cleaning width 2 brushes	2533 mm
Cleaning width 3 brushes	3520 mm
Cleaning width 3 brushes (RCB)	3768 mm
Turning radius	2950 mm

Tyres

265 / 70 R 19.5 143 / 141J

* According to national legislation

Driving Performance

Working speed	0-20 km/h
Travelling speed	0-80 km/h*
Climbing ability	up to 30 %

Noise emissions

Noise level L _{WA}	99 dB(A)
Noise level cab	63 dB(A)

Chassis

Bucher fabricated ladder frame chassis with "C" Rail construction	
GVW	10 500 kg
Empty weight	5500 kg
Payload	5000 kg

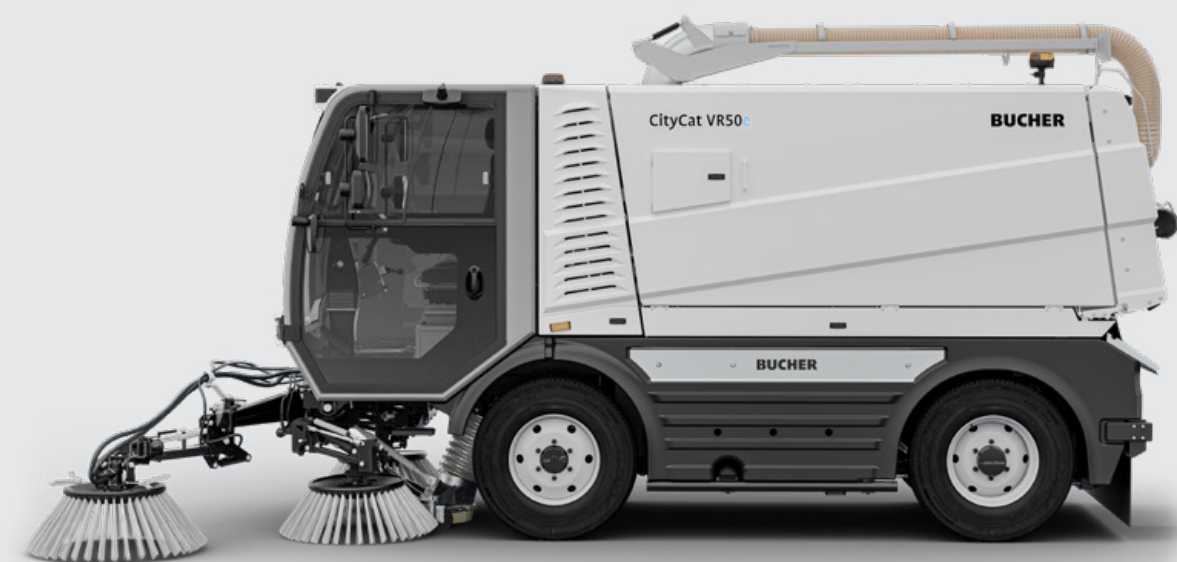
Engine Euro 6

FPT, Iveco Euro 6	NEF 4 Euro VI
Engine displacement	4485 cm ³
Output	118 kW
Torque	580 Nm
AdBlue tank	30 l

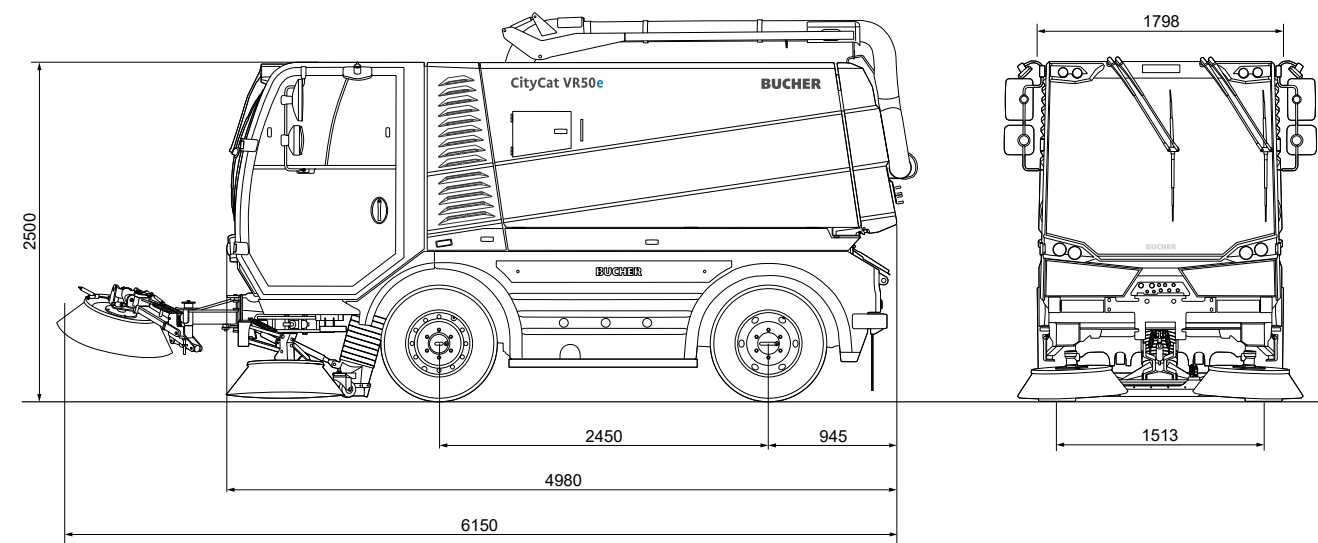
Engine Stage IIIA*

FPT, Iveco Stage IIIA	NEF4 Stage III A
Engine displacement	4485 cm ³
Output	104 kW
Torque	608 Nm

Fuel tank	110 l
Electrical system	24 V



Bucher CityCat VR50e configuration



Dimensions

Length	4980 mm
Width	1798 mm
Height	2500 mm
Wheelbase	2450 mm
Track width	1513 mm
Cleaning width 2 brushes	2533 mm
Cleaning width 3 brushes	3520 mm
Cleaning width 3 brushes (RCB)	3768 mm
Turning radius	2950 mm

Tyres

265 / 70 R 19.5 143 / 141J

Driving Performance

Working speed	0-20 km/h
Travelling speed	0-50 km/h*
Climbing ability	up to 30 %

Noise level

92 dB(A)

Chassis

Bucher fabricated ladder frame chassis with "C" Rail construction	
GVW	10 500 kg
Empty weight	5800 kg
Payload	4700 kg

HV Battery

Battery type	Li-ion
Battery capacity	137 kWh
Nominal voltage	573 Volt
Operating time	up to 10 hours

Charging system

On-board charger	22 kW
Charging time	5 to 6 hours
External charger DC ¹	70 kW
Charging time	1.5 to 2 hours

* According to national legislation

¹ Option

Get Connected

Bucher Connect is a holistic after sales solution. A leading fleet management system, with comprehensive care and a digital platform for your repair and service planning – all in one simple package.

Using Bucher Connect makes the daily workload much easier for owners and managers of any fleet size. Our all-inclusive service offers targeted support and services for street cleaning and clearing operations, to minimise downtime and costs through the optimal efficiency of vehicles and equipment.

One connection **Many benefits**

Combining a digital platform with the complete after sales service, Bucher Connect has everything you need to operate your fleet at its best. It can be perfectly tailored to your needs through five different packages, as well as additional services and products.

Digital platform

Featuring two components, our «Fleet» module displays current machine positions, error messages with repair suggestions and important vehicle parameters, while «Service» takes care of all your repair and service needs.

This is supplemented by the two role-specific modules: «Jobs» and «Analytics». On a road map, route planning and road sweeps are marked in different colours for easy handling, with individual tracks via the address search.

«Fleet» for a detailed overview

- Current vehicle status and GPS position to give an overview of the fleet and detect potential breakdowns early
- Automatic fault alerts and digital support to enable quick resolution
- Service reminders for efficient workshop planning

«Jobs» for route planning and monitoring

- Digital cleaning report instead of manual operating logs and «On the route» KPIs for track

«Analytics» for fleet optimisation

- Optimise uptime for improved fleet productivity
- Optimise energy demand for improved sustainability and lower costs
- Easy reporting of vehicle data

«Service» for repair and service planning

- Access to the e-shop, workshop manuals and maintenance plans for optimal service
- One touch point for all your repair and service needs

Maintenance and repair

The maintenance and repair service enables you to focus on core business. Your maintenance partner carries out maintenance in accordance with factory specifications and uses trained service technicians, supporting you in procuring spare parts and providing remote support to reduce downtime.

Digital spare parts procurement

- Proactive service announcement
- Automatic service parts delivery to end-customers
- Time savings and prompt delivery for efficient workshop operation

Certified service

- Certified service and repair work for optimal fleet availability
- Comprehensive service and repair contract for predictable financial planning

Technical training

- Technical vehicle training
- Efficient vehicle use and higher first-time fix rate

Remote support and diagnostics

- Reduced downtime for optimal fleet use

Bucher CityCat VR50e - honoured
by **design and innovation awards**
for its originality, innovations and
claim to sustainability.





For local contact and support, please scan the QR code or visit

buchermunicipal.com

At Bucher Municipal, we innovate and engineer better cleaning and clearing solutions, helping our customers grow and maintain efficient and profitable businesses. Leveraging the over 200-year-old heritage of Bucher, we are committed to helping you achieve more using less. Taking pride in being seen as a reliable partner, we work locally with you in realising the possibilities for a smarter, cleaner and more efficient tomorrow. Today.

