

Toyota Very-Narrow-Aisle Trucks

The BT Vector Range



BT Vector R-series

MAN-DOWN VNA TRUCK



Man-down VNA truck suitable for pallet handling in medium-intensity operations. Turret head forks or high speed slide-through fork versions.

1.25 – 1.5 TONNES LOAD CAPACITIES

LIFT HEIGHTS UP TO 11.3 M

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BT Vector A-series

MAN-UP VNA TRUCK WITH ARTICULATED CHASSIS AND SHUTTLE FORKS



Trucks with articulated chassis providing high-level order picking and full-pallet handling and the space saving benefits of advanced VNA operation.

1.25 TONNES LOAD CAPACITIES

LIFT HEIGHTS UP TO 13,3 M

P. 8-11

BT Vector A-series

MAN-UP VNA TRUCK WITH ARTICULATED CHASSIS



Trucks with articulated chassis providing high-level order picking and full-pallet handling and the space saving benefits of advanced VNA operation.

1.5 TONNES LOAD CAPACITY

LIFT HEIGHTS UP TO 16.8 M

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TOYOTA BT VECTOR R-SERIES



For man-down work, the BT Vector R-series is based on the class-leading BT Reflex reach truck. It is available with turret-head fork design or shuttle forks (VRE125SF), which require less aisle width and allow high-speed lateral pallet handling.

SPECIFICATIONS

Load capacity: 1.25, 1.5 t @ 600 mm load centre

Maximum lift height: 11.0 m (11.3 m for VRE125SF)

Maximum battery capacity: 930 Ah

Options available: | Site  





Load camera option



Aisle camera option



Auto-rotation option



Easy servicing

● standard ° option

Truck features

	Safety	Durability	Productivity	Driveability	BT Vector VRE 125	BT Vector VRE 125SF	BT Vector VRE 150
Adjustable fork width					●	●	●
Automatic parking brake		●		●	●	●	●
Optipace System	●			●	●	●	●
Choice of chassis widths					●	●	●
Clear-view mast	●			●	●	●	●
Clear-view overhead guard	●				●	●	●
Electronic braking system	●	●		●	●	●	●
Electronic regenerative brakes (motor)				●	●	●	●
Electronic speed control	●			●	●	●	●
Electronic support arm brakes				●	●	●	●
Enclosed cab				○	○	○	
Fork spreader				○	○	○	
Shuttle forks				●	●	●	
Warning beacon	●			○	○	○	
Wire/rail guidance				○	○	○	
Working lights	●			○	○	○	

Controls and instruments

360° progressive steering	●	●	●	●	●	●	●
Access Control (PIN codes)					●	●	●
Adjustable Control console					●	●	●
Automatic deceleration	●				●	●	●
Auto-rotation of forks	○	○	○				
Camera/monitor system	○	○	○				
Drive motor temperature warning	●				●	●	●
E-bar					●	●	●
Electronic controller temperature warning	●	●			●	●	●
Electronic fingertip controls	●				●	●	●
Electronic height indicator					●	●	●
Emergency cut-off	●				●	●	●
Height pre-selector	○	○	○				
Hour meter					●	●	●
Load information display	○	○	○				
Mini-joystick electronic controls					●	●	●
Multifunction control					○	○	○
On-board data terminal mount					○	○	○
Parking brake	●				●	●	●
Pedals as in a car	●		●		●	●	●

● standard ° option

Controls and instruments

Power/Electronic steering	●	●	●	●	●	●	●
Split control panel				●	●	●	●
Steering direction indicator	●	●	●	●	●	●	●
Weight indicator				●	●	●	●

Operator Features

Adjustable seat	●	●	●	●	●	●	●
Adjustable seat with safety belt	○	○	○	○			
Adjustable steering wheel	●	●	●	●	●	●	●
Driver detection system				●	●	●	●
Driver-adapted programmable performance	●	●	●	●	●	●	●
Heated seat	○	○	○	○			
Low step-in	●	●	●	●	●	●	●
Storage compartments	●	●	●	●	●	●	●
Writing table	○	○	○	○			

Maintenance features

Easy access for maintenance	●	●	●	●	●	●	●
Fault diagnosis facility	●	●	●	●	●	●	●
Historic fault log	●	●	●	●	●	●	●

Battery management features

Battery change facility	●	●	●	●	●	●	●
Battery discharge prevention system	●	●	●	●	●	●	●
Battery status indicator	●	●	●	●	●	●	●
Heavy-duty battery compartments	●	●	●	●	●	●	●
Regenerative lowering	●	●	●	●	●	●	●
Sideways battery change	●	●	●	●	●	●	●

Special applications

Coldstore version	○	○	○	○	○	○	○
Ex version (ATEX)	○	○	○	○	○	○	○

Compact design

The truck has a very small footprint which means less space is needed for aisle transfer allowing better use of storage space.

High performance with TLC

Travel speeds up to 14 km/h and high-speed lifting/lowering ensure maximum productivity. The patented and unique Transitional Lift Control (TLC) system ensures completely smooth, shock-free lifting and lowering, even at maximum speed.

Totalview Concept

The design of the overhead guard is also patented and unique to BT Vector R-series trucks. It provides a clear upward view to the forks when working at height.

Optipace

Optipace controls the speed of the truck when operating in narrow aisles, providing the highest safe drive speed taking into account the load weight and operating height.

TPS-based reliability

Like all Toyota trucks, BT Vector trucks are built according to the Toyota Production System, assuring the highest levels of quality, durability and reliability.



TOYOTA BT VECTOR A-SERIES

The chassis provides excellent stability and minimises the space required for aisle-to-aisle transfer thanks to articulated steering. As less space is needed to turn, more storage space becomes available. Productivity levels are exceptional, with outstanding work rates.

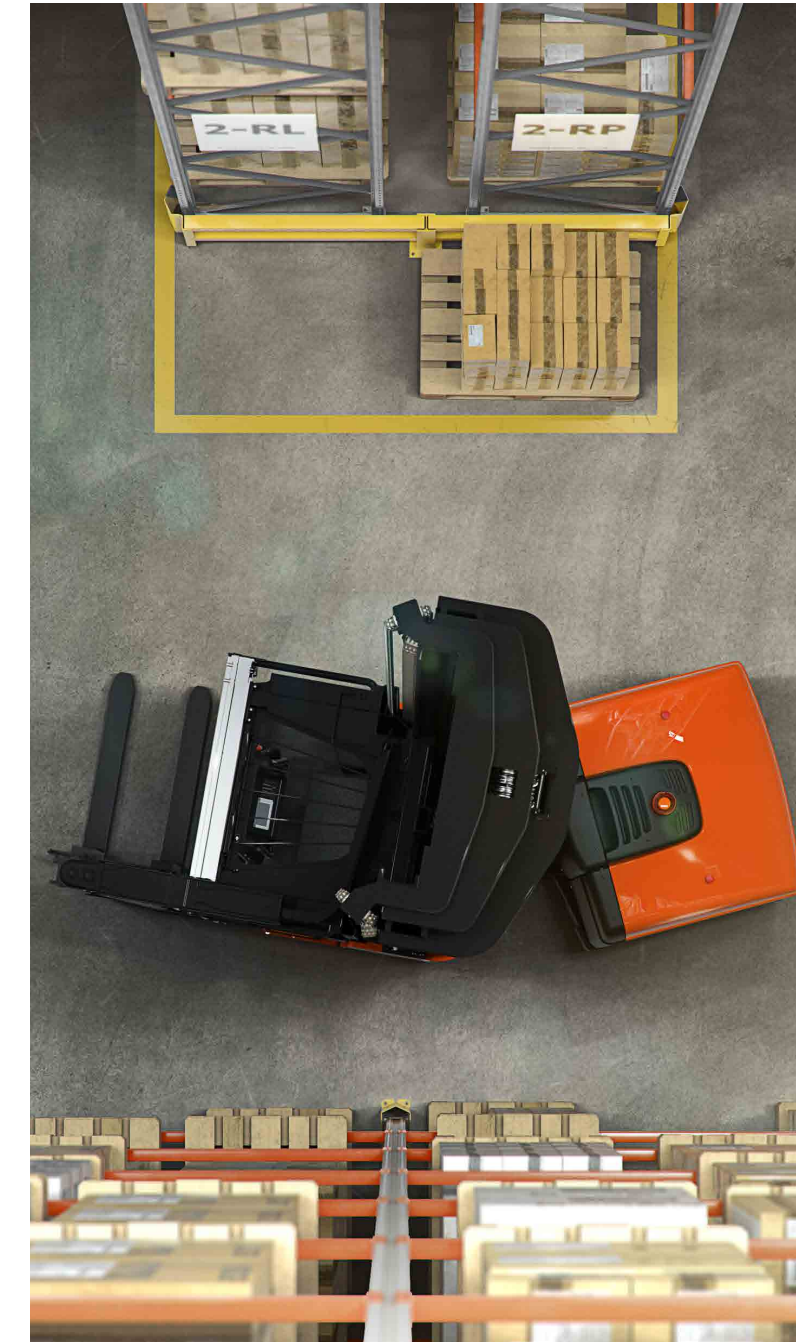
SPECIFICATIONS

Load capacity: 1.25, 1.5 t @ 600 mm load centre

Maximum lift height: 16.8 m

Maximum battery capacity: 1240 Ah

Options available: | Site ❄️ Ex **LI-ION**

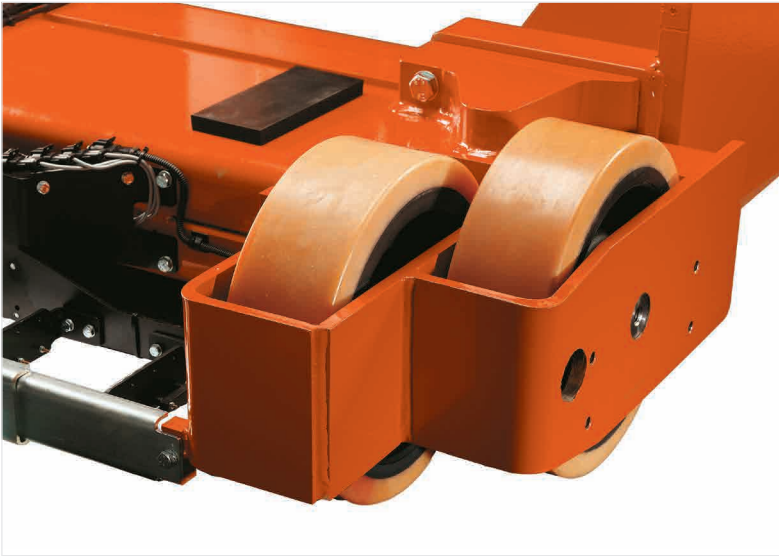




The A-series' Advanced Lifting System significantly reduces the amount of battery energy required to lift the cab and load, allowing two-shift operation on a single charge.



Integrated control panel.



Staggered front wheel arrangement increases stability while reducing floor loading.



The articulated chassis allows for a more compact turning radius, resulting in saving space and time.

● standard ° option

	Safety	Durability	Productivity	Driveability	BT Vector VCE125ASF	BT Vector VCE150A
Truck features						
Adjustable fork width			●		●	●
Articulated chassis			●	●	●	●
Automatic parking brake	●			●	●	●
Advanced Lifting System (ALS)			●		●	●
Optipace System	●		●		●	●
Choice of cab widths			●		●	●
Choice of chassis widths			●	●	●	●
Clear-view mast	●		●		●	●
Clear-view overhead guard	●		●		●	●
Electronic braking system	●	●	●	●	●	●
Electronic regenerative brakes (motor)	●		●		●	●
Electronic speed control	●		●		●	●
Electronic support arm brakes	●		°	°	°	°
Elevating platform	●		●		●	●
Enclosed cab			°	°	°	°
Fork spreader			●		°	°
Shuttle forks			●		●	●
Sideshift	●		●	●	°	°
Warning beacon	●		●		●	●
Wire/rail guidance	°		°	°	°	°
Working lights	°		°	°	°	°

Controls and instruments						
Adjustable Control console			●	●	●	●
Automatic deceleration	●		●		●	●
Auto-rotation of forks			°	°	°	°
Camera/monitor system	°	°	°	°	°	°
Drive motor temperature warning	●	●	●		●	●
Electronic controller temperature warning	●		●		●	●
Electronic fingertip controls	●		●	●	●	●
Electronic height indicator	●		●	●	●	●
Emergency cut-off	●		●		●	●
Height pre-selector	°	°	°	°	°	°
Hour meter	●		●		●	●
Parking brake	●		●		●	●
Power/Electronic steering	●		●	●	●	●

● standard ° option

	Safety	Durability	Productivity	Driveability	BT Vector VCE125ASF	BT Vector VCE150A
Controls and instruments						
Programmable gate security	●				●	●
Steering direction indicator	●		●	●	●	●
Weight indicator	●		●		●	●

Operator Features						
Adjustable seat	●	●	●	●	●	●
Adjustable steering wheel	●		●	●	●	●
Aisle identification						
Driver detection system					●	●
Driver-adapted programmable performance	●		●	●	●	●
Folding seat			●	●	●	●
Heated seat			°	°	°	°
Li-ion	●	●	●	●	●	●
Low step-in	●	●	●	●	●	●
Navigation with and without WHMS	°	°	°	°	°	°
Writing table	°	°	°	°	°	°
Zoning	°	°	°	°	°	°

Maintenance features						
Easy access for maintenance	●	●	●	●	●	●
Fault diagnosis facility	●	●	●	●	●	●
Historic fault log	●	●	●	●	●	●
Lubrication points	●	●	●	●	●	●

Battery management features						
Battery change facility	●	●	●	●	●	●
Battery discharge prevention system	●	●	●	●	●	●
Battery status indicator	●	●	●	●	●	●
Regenerative lowering	●	●	●	●	●	●
Sideways battery change	●	●	●	●	●	●

Special applications						
Coldstore version	°	°	°	°	°	°

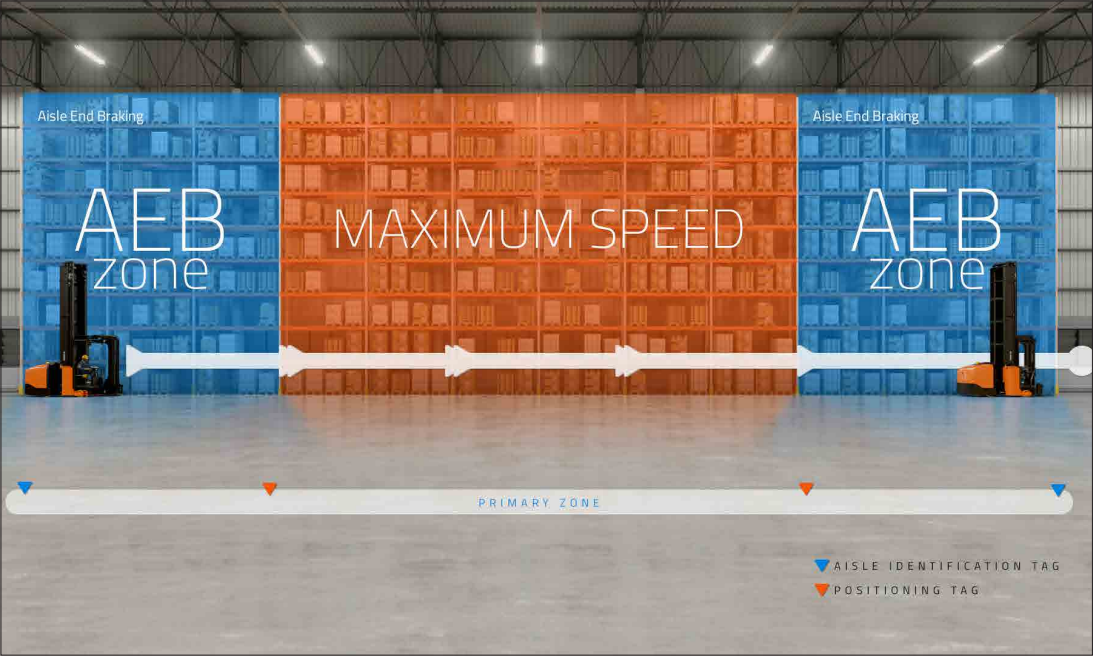
Unique articulated chassis design
The BT Vector A-series' unique articulated chassis allows it to drive between aisles using a transfer aisle up to one metre narrower than that required by a non-articulated truck. This means that typically an extra four pallet positions can be provided on each level within an aisle, and with lift heights to well over 14 metres it can result in up to 60 extra pallet positions per aisle. This gives substantial cost savings in terms of space, but not at the cost of productivity. Aisle transfer typically takes less than 10 seconds.

Advanced Lifting System
The energy required to lift the cab and load is significantly reduced by Toyota's Advanced Lifting System. It is a fully integrated combination of hydraulic and gas-pressure lifting, using precise electronic control for seamless and smooth operation. Inert nitrogen is compressed in a sealed system as the cab is lowered. The stored energy is then used to aid the next lifting movement. As a result the lift motor is working to lift little more than the weight of the load itself, saving energy. Two-shift operation is possible on a single charge.

Optipace
Optipace controls the speed of the truck when operating in narrow aisles, providing the highest safe drive speed taking into account the load weight and operating height.

TPS-based reliability
Like all Toyota trucks, BT Vector trucks are built according to the Toyota Production System, assuring the highest levels of quality, durability and reliability.

Li-ion battery technology
This maintenance-free battery technology offers 30% less energy consumption, exceptional battery life and the option for fast charging at any time, eliminating the need for battery change.



FEATURES AVAILABLE ON ALL MODELS

Aisle indication: In-aisle control, especially at the aisle ends, is essential in VNA operations. Aisle indication allows for maximum speed, while ensuring correct deceleration when exiting the aisle, thanks to the Aisle End Braking (AEB) and Aisle End Stop (AES) zones, enhancing safety.

Zoning: Prioritises safety and reliability by adapting to a variety of local in-aisle building constraints such as roof beams, ventilation shafts, etc. This way, speed, lift height or fork movements can be restricted on certain dates and times to ensure safe movement through the aisle.

NAVIGATION WITH AND WITHOUT WMS

The pallet locations are programmed in the truck, letting the operator preset the truck to go from point to point. As the truck calculates the optimal route from point A to B, it takes the quickest, most effective route. Adapting its driving speed depending on the lift height, it will go faster at a low height and slower at a higher height. Resulting in a leaner operation, saving time by reducing cycle times, significantly improving productivity. Integratable with your warehouse management system.



VNA racking from Toyota

Toyota always works with a total-solution approach to fulfil storage and intra-logistics requirements by combining the right forklift trucks with the right racking type.

Our conventional racking system in combination with our VNA trucks maximises storage capacity. With add-ons such as pick and drop stations and guiding rails, operation runs smoothly and safely.

Toyota Material Handling in Europe

Total coverage

The Toyota Material Handling network extends to over 30 countries in Europe with more than 5000 mobile technicians.

Always local – with global support

Wherever you are located in Europe, we are always local, due to our extensive coverage, but with the stability and back-up of a worldwide organisation.

Made in Europe

Over 95% of trucks we sell are built in our own European factories, in Sweden, France and Italy – all to TPS quality standards. We employ over 3000 production staff in Europe and work with over 300 European suppliers.

Approximately 15% of our European production is exported to other parts of the world.

