



4409.25lb

Rated Load Capacity



4.47mph

Max. Safety Driving Speed



285.63in

Fork Lifting Height



129.92in

Min. Stacking Aisle Width

VNR20(VL)-01

REACH TRUCK AGV

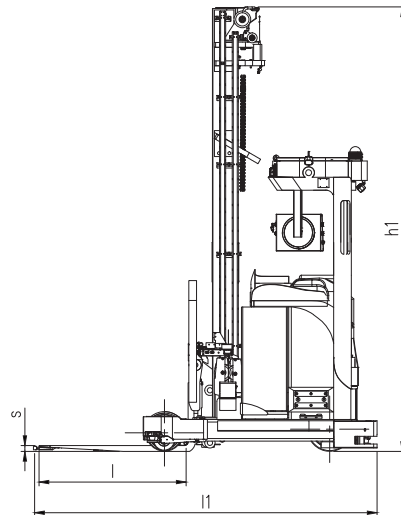
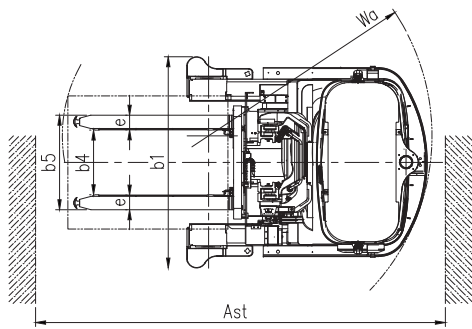


B56.5

The combination of navigation module (Vision-based or 3D SLAM) and 3D Laser perception module provides higher accuracy on different perspectives such as vehicle positioning, goods loading, goods unloading, and etc. The VNR series has 360-degree laser safety protection with mechanical protection. In addition, it is suitable for selective pallet rack, and other high position storage scenarios.



VNR20(VL)-01



TECHNICAL SPECIFICATIONS

Body Weight	7627.99lb (3460kg)		Fork Lifting Height	285.63in (7255mm)
Vehicle Dimensions (l1/b1/h1)	Reach Retracts	105.20x64.37x135.04in (2672x1635x3430mm)	Rated Load Capacity	4409.25lb (2000kg)
	Reach Extends	129.72x64.37x135.04in (3295x1635x3430mm)	Load Center Distance	23.62in (600mm)
Fork Dimensions (l/e/s)	40.90x3.94x1.77in (1115x100x45mm)		Min. Turning Radius	75.39in (1915mm)
Optional Fork Dimensions Series	49.80/53.74/57.68/61.61in (1265/1365/1465/1565mm)		Supporting Legs Height	14.69in (373mm)
Fork Outer Width (b5)	27.95in (710mm)		Side Shift Range	±3.15in (±80mm)
Fork Inner Width (b4)	19.13in (486mm)		Stacking Accuracy	±0.39in/±0.5° (±10mm/±0.5°)
Mast Forward Distance	24.52in (623mm)		Operation Mode	Automatic / Manual Seated
Positioning Method	Vision-based Navigation		Battery Type	Lithium iron phosphate
Perception Method	3D Laser scanner		Voltage/Battery Capacity	48V/400Ah
Goods Pick-up Self-adaptability	±3.94in/±10° (±100mm/±10°)		Charging Mode	Manual/ Automatic Charging

MOTION PERFORMANCE

Straight Forward Speed (Full-Load/Empty-Load)	4.47mph , 4.47mph (2.0m/s, 2.0m/s)	Backward Turning Speed (Full-Load/Empty-Load)	0.67mph , 1.34mph (0.3m/s, 0.6m/s)
Straight Backward Speed (Full-Load/Empty-Load)	1.34mph , 1.34mph (0.6m/s, 0.6m/s)	Lifting Up Speed (Full-Load/Empty-Load)	0.72mph , 1.14mph (320mm/s, 510mm/s)
Forward Turning Speed (Full-Load/Empty-Load)	0.67mph , 1.34mph (0.3m/s, 0.6m/s)	Lifting Down Speed (Full-Load/Empty-Load)	1.23mph , 0.89mph (650mm/s, 400mm/s)

ENVIRONMENTAL REQUIREMENT

Min. Stacking Aisle Width (Pallet Size L*W:1219*1016mm, Across Forks On Width)	129.92in (3300mm)	Ground Flatness	±0.12in/m ² (±3mm/m ²)
Min. Turning Aisle Width (Pallet Size L*W:1219*1016mm, Across Forks On Width)	102.36in (2600mm)	Max. Climbing Capability (Full-Load/Empty-Load)	10%,10% (6°,6°)
Working Temperature	-5°C~ 40°C	Max. Groove Width	1.18in (30mm)
Working Humidity	20%~95%	Max. Step Height	0.39in (10mm)

SAFETY PROTECTION

Front	Laser Scanner Protection + Anti-Collision Bumper	Side	Laser Scanner Protection + Anti-Collision Bumper
Rear	Laser Scanner Protection + Contact Sensor	Other	Emergency Stop Button + Acousto-Optic Alarm
Top	Photoelectric Sensor + Ultrasound Scanner		

• Side shifter is standard configuration, Optional 3D SLAM positioning; Optional triplex mast lifting height 226.57/285.63/336.81/ 372.24/411.61/450.98in (body weight with the height of the door frame is different slightly different); Optional 5G communication, battery heating, battery trolley, cargo ultra high detection, UWB warning system, scan gun, traffic recorder, RFID card reader, etc. Maximum load capacity varies with lifting height, please refer to load capacity curve. All the above parameters are obtained from the factory testing environment of standard products, and the vehicle parameters and performance of the project may vary according to actual conditions. Due to iterative upgrades on products, some of the specifications being listed above and the appearance of the products may not be able to change in time. For details, please contact our salespersons.