



3527.40lb

Rated Load Capacity



4.47mph

Max. Safety Driving Speed



226.57in

Fork Lifting Height



127.95in

Min. Stacking Aisle Width

VNR16(VL)-01

REACH TRUCK AGV

CE

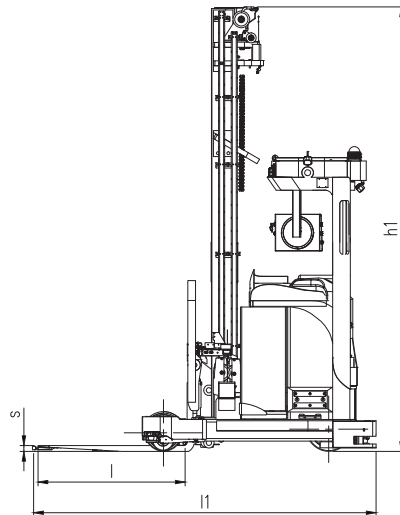
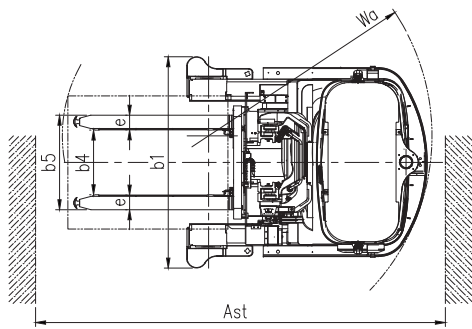


B56.5

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.



VNR16(VL)-01



TECHNICAL SPECIFICATIONS

| | | | | |
|---------------------------------|---------------------------------------------------|-----------------------------------------|--------------------------|-----------------------------|
| Body Weight | 7032.75lb (3190kg) | | Fork Lifting Height | 226.57in (5755mm) |
| Vehicle Dimensions (l/b1/h1) | Reach Retracts | 104.37x39.69x97.48in (2651x1635x2476mm) | Rated Load Capacity | 3527.40lb (1600kg) |
| | Reach Extends | 125.39x64.37x97.48in (3185x1635x2476mm) | Load Center Distance | 23.62in (600mm) |
| Fork Dimensions (l/e/s) | 40.90x3.94x1.77in (1115x100x45mm) | | Min. Turning Radius | 70.87in (1800mm) |
| Optional Fork Dimensions Series | 49.80/53.74/57.68/61.61in (1265/1365/1465/1565mm) | | Supporting Legs Height | 13.38in (310mm) |
| 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 | 21.02in (534mm) | | 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 (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) | 0.89mph , 1.48mph (400mm/s, 660mm/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 , 1.01mph (550mm/s, 450mm/s) |

ENVIRONMENTAL REQUIREMENT

| | | | |
|--------------------------------------------------------------------------------|-------------------|-------------------------------------------------|-----------------------------------------------|
| Min. Stacking Aisle Width (Pallet Size L*W:1219*1016mm, Across Forks On Width) | 127.95in (3250mm) | Ground Flatness | ±0.12in/m ² (±3mm/m ²) |
| Min. Turning Aisle Width (Pallet Size L*W:1219*1016mm, Across Forks On Width) | 98.43in (2500mm) | 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 226.57/285.63/336.81/372.24in (body weight with the gantry height is 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.