

AGILOX OFL Datasheet



Find comprehensive details
and specifications of the
AGILOX OFL in the booklet.

www.scanlox.com

AGILOX OFL

Free Lifter

Scissor-Free

SWARM Intelligence

Omnidirectional

Open Interfaces

Analytics



The AGILOX OFL is a scissor-free AMR that redefines flexibility in material handling. Its innovative design enables seamless transportation, stacking, and storage of pallets and other load carriers up to a height of 1.200 mm without requiring infrastructure changes.

With omnidirectional movement and advanced safety technology, the OFL ensures precise, efficient, and fully autonomous operation in any environment.



Performance Data

1.200

Max. Lifting Height

800 kg

Max. Lifting Weight

1,4 m/s

Max. Speed

Dimensions

1.655 x 800 x 1.988 mm (L x W x H)

Specifications

4 Omnidirectional Drives

Drive System

2.200 mm

Turning Circle

Dual Electric Spindles

Lift System

575 kg








Unit Weight



LiFePO4 with BMS 3 min charging = 1 h operation

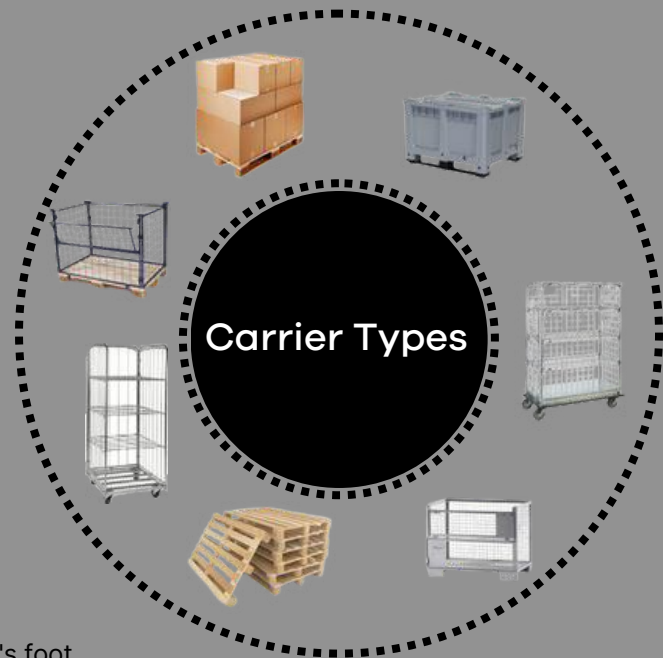
Battery

Specification

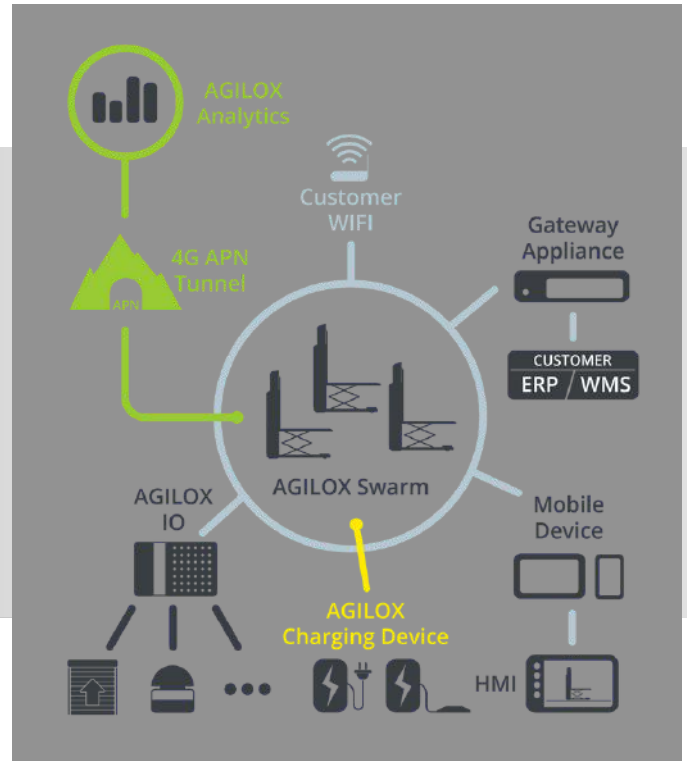
Details

 Pallet	800 / 1.000 / 1.200 EUR format
 Boxes	Plastic / wood / metal
 Palletboxes	Plastic / wood / metal
 AGILOX Boxcarrier	
 Cart	
 Cages / Rollercages	
 Exeptions	Carriers with closed bottom

-  Other types of carriers - inquiry to supplier
-  NB: The vehicle is not limited by plastic wrap on the pallet's foot



System Overview



Efficient Charging

Operates 24/7 without battery replacement. 60 minutes of operation with just 3 minutes of charging.



Wi-Fi Connectivity

Requires customer-provided Wi-Fi for seamless communication between vehicles.



System Integration

Easily connects to customer ERP, WMS, or MES via AGILOX JSON API.



Swarm Intelligence

Decentralized navigation optimizes fleet coordination and efficiency.



Mobile Control

The AMRs are managed via smartphone, tablet, or any browser-enabled device.



User-Friendly HMI

The interface is accessible through a web browser, ensuring easy interaction at any time.



Seamless Infrastructure Integration

The IO Box enables connection with existing systems, such as roller doors and fire alarms.



Advanced Analytics

Real-time access to key performance data from anywhere.

HMI

Customer-friendly Interface



The control system features a user-friendly and flexible HMI, providing full control, real-time monitoring, and the ability to adjust autonomous mobile robots and system settings on any device.

Key Features

Open Interface

Seamless integration with existing systems.

Zoom function

Improved screen visibility for detailed operation.

Realtime Vehicle Overview

Instant status updates on all AGILOX units.

Direct Workflow Adjustments

Modify layouts and parameters instantly.

Heatmaps

Visualize movement patterns and optimize efficiency.

Comprehensive Tools

All necessary tools included, with error notifications via email or SMS.

Integrated Documentation

Always accessible and directly embedded.

AGILOX seamlessly integrates with customer management systems. Orders from WMS, ERP, PMS, or MES are automatically converted into transport requests. The integration is provided as a gateway solution with an API (REST) for communication, utilizing JSON scripts combined with OPC I/O.

Flexible Order Trigger Options

Easy Button

Operators can initiate transport orders via screen-configured buttons.

Scheduled Orders

Predefined transport tasks executed at specific times or intervals.

Sensor Activation

Automatic triggering based on PLC signals.

Software Integration

Seamless connectivity with customer management systems.

AGILOX Analytics

Performance Data

Easy Access

Analyze logistics data effortlessly via a browser.

Optimized Operations

Leverage real-time insights to improve fleet efficiency.

Maximum Security

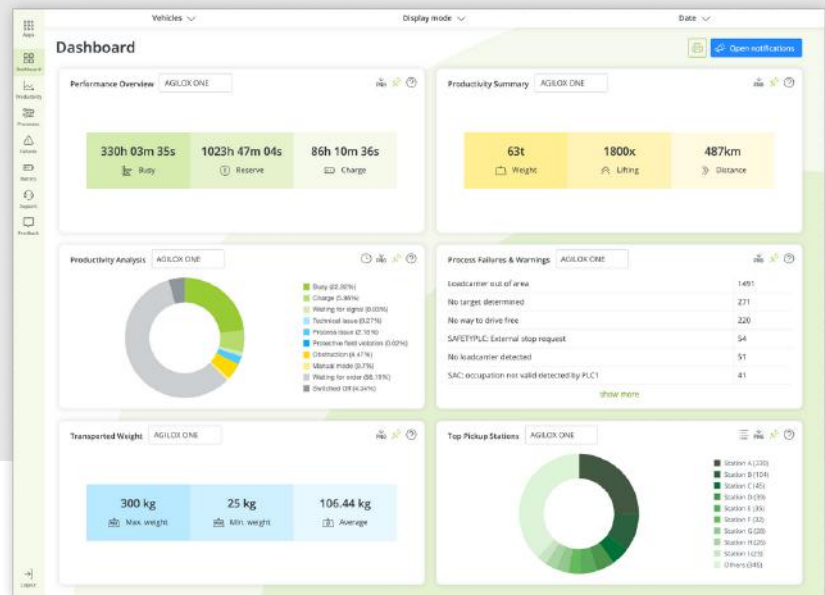
Certified data center with highest security encryption.

Detailed Reports

3.5 billion + data points per vehicle for precise analysis.

Anywhere, Anytime

Access data from any device for continuous optimization.



 **Safety in the Overview by**

APN connection

ISO 27001 certified data centers

Encryption according to highest standards

Embracing the Power of Simplicity



X-SWARM Technology

One for all. All for one. All for you

All Agilox AMRs communicate in real time, exchanging data on their position and status several times per second. They autonomously allocate tasks, manage the supply and removal of goods, efficiently navigate by identifying free routes, and effortlessly adapt to changes in their environment.



Plug & Perform

it's as easy as that

Plug & Perform technology allows for AMR deployment in under 12 hours, with workflows adaptable in minutes. Skip the long implementation times and high commissioning costs while easily integrating third-party modules, such as (high-)speed doors and IT systems. Built for open communication, the AMRs use Wi-Fi connectivity for smooth interaction and control.



Unique Simplicity

Because it's about ease of use

Engineered with a user-first approach, the technology is designed for intuitive and seamless operation. Hardware, controls, software, and cloud architecture are developed in-house and fully integrated to streamline every phase, from commissioning and operation to maintenance, control, and workflow adjustments.



Flexibility

Being flexible is a guarantee of success

The AMRs instantly adjust to changing requirements with a single click. Stations, map layouts, and entire workflows can be created, modified, or relocated effortlessly, without extra costs or external assistance.



Safety

It's also absolutely safe

The AMRs operate safely alongside employees, navigating shared travel and transport routes without incidents. Advanced safety sensors and a dynamic 360° protective field enable smooth and efficient performance in mixed traffic environments. They are certified to meet key industry safety standards, including CE, UL, and ISO 3691-4.



Supply Chain

Simply no more Standstill. 24/7

Maintain a seamless material flow with absolute flexibility, even in dynamic environments. In the event of a robot failure, the remaining AMRs in the swarm automatically take over to ensure uninterrupted operations. Prevent supply shortages and optimize transport throughput times with fully automated efficiency. Thanks to ultra-fast charging, AMRs are ready for use again within minutes, ensuring a perfectly synchronized material flow.

Features and Add-Ons



Obstacle Avoidance

3D sensor system improves safety in human-machine environments.



Signal Lighting

Multi-color signals (blue, green, red) for increased visibility, with additional fork-tip lights (white, yellow).



Charging Devices

Available as mobile or stationary units.



ESD Protection

Prevents electrostatic charging in ESD-sensitive areas.



Rubber Guards

Front and fork-tip protection to deflect dirt.



Barcode Reader

Reads barcodes and QR codes for identification.



Touch Display

Provides a clear overview of the AMR's status and enables simple user interactions.



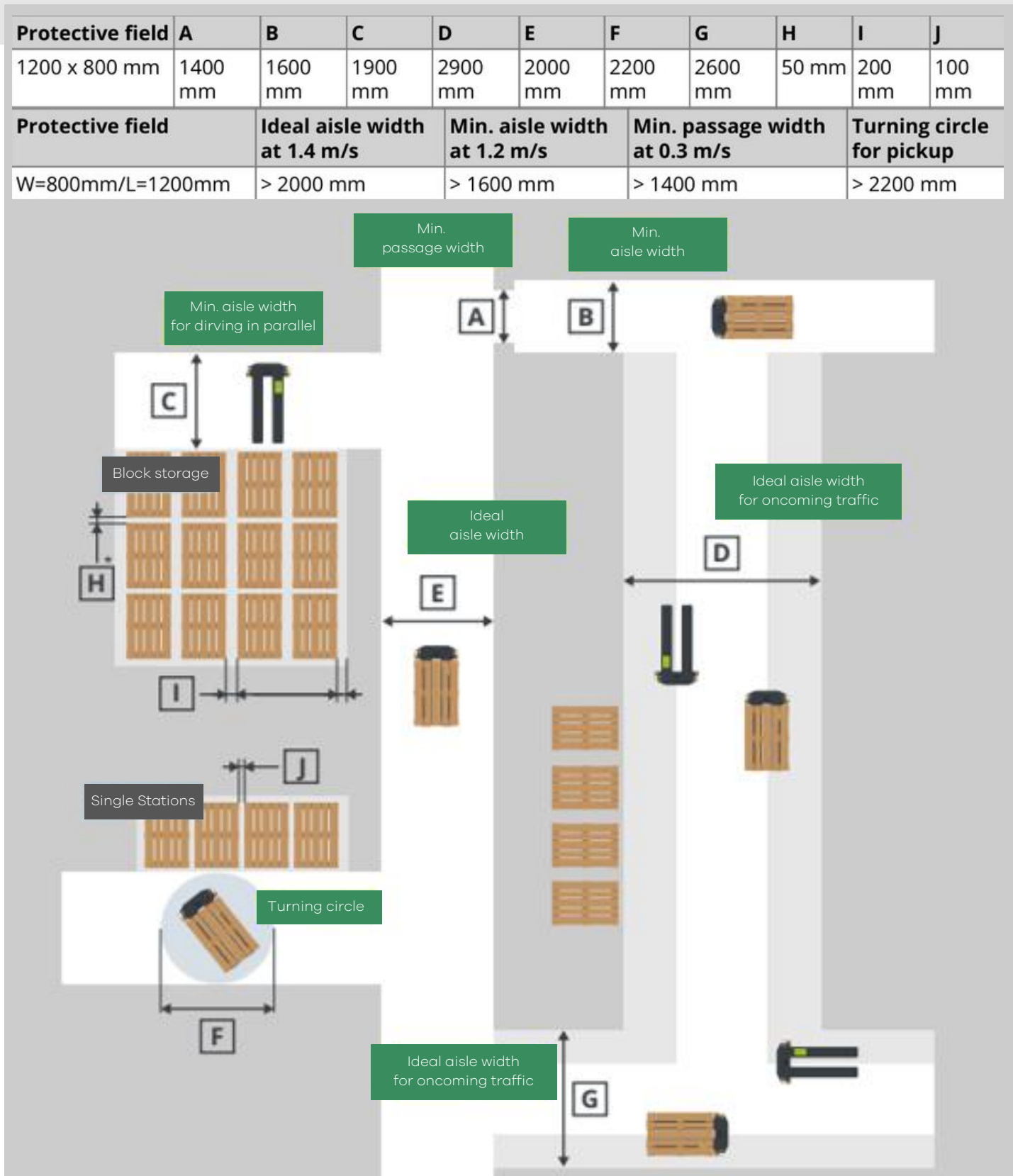
Safety & Scanners



The AMRs are equipped with advanced safety systems designed to protect employees, infrastructure, and the robots themselves.

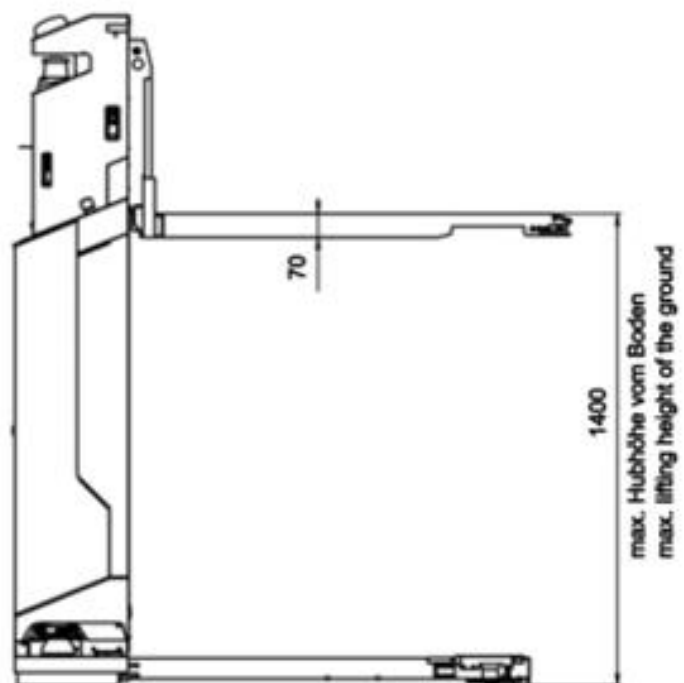
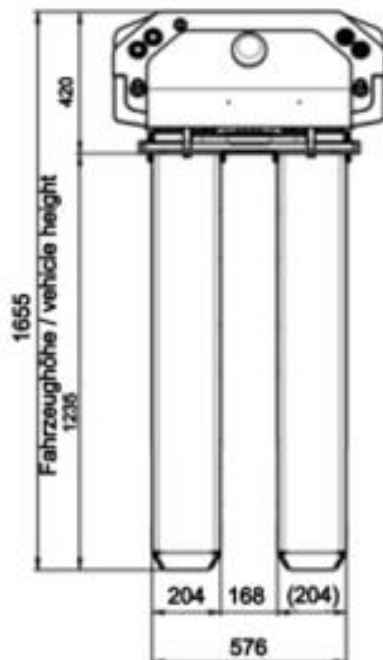
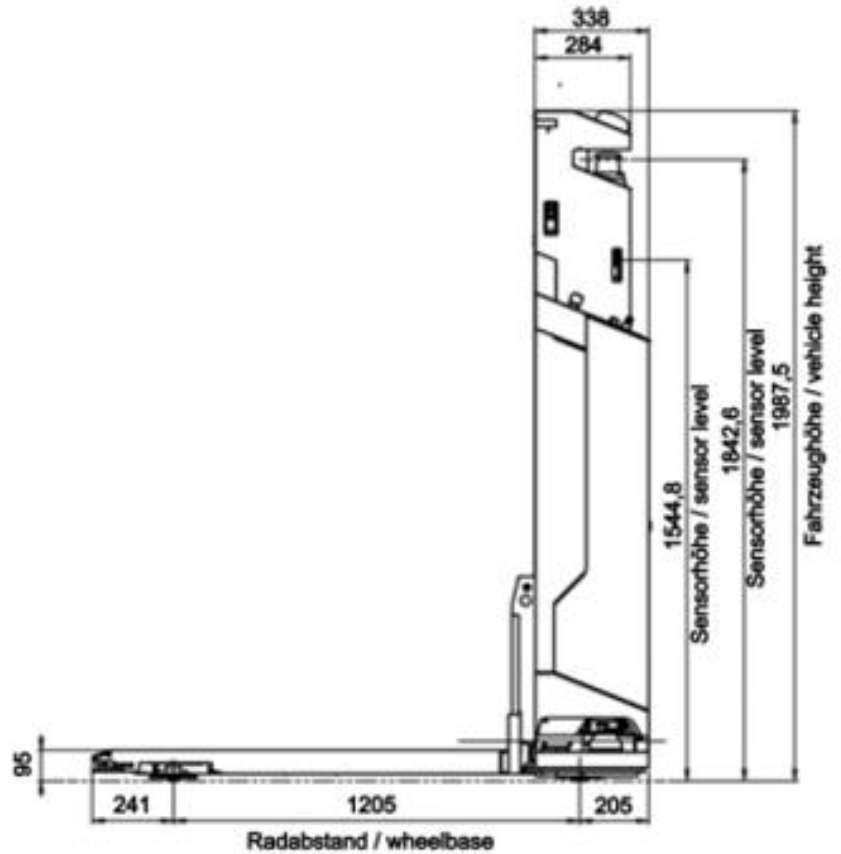
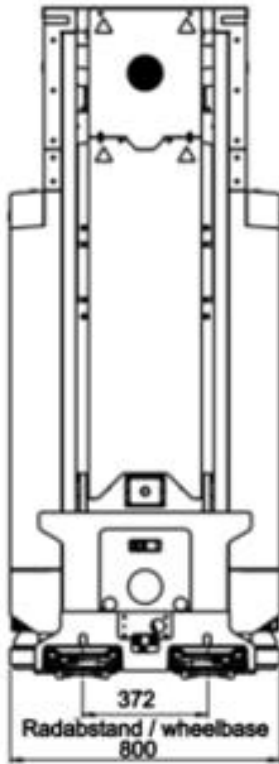
Compliance with international standards such as **ISO 3691-4** and **EN1525**.

Drive Path Design



Dimensions

Scissor-Free Lifting System



Variations



ONE AMR



ONE Longer Forks 1400 | 1600 | 1800



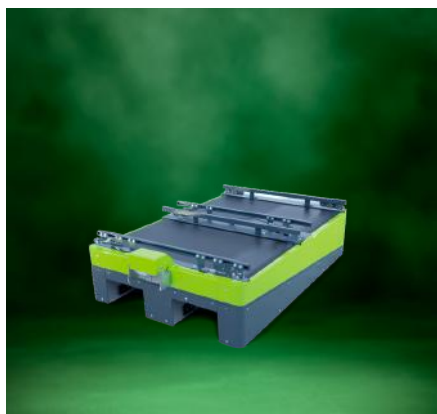
NFK Mono Fork 1200 | 1400



ODM Mono Fork 600 | 800



OCF Free Forks 1200 | 1400
Payload: 1.500 kg | 750 kg
Max. Lift Height:
1.600 mm = Vehicle Height 2,56 m
1.200 mm = Vehicle Height 2,34 m



Box Carrier Different Variants