SCANLOX
SCANDINAVIAN LOGISTICS

# AGILOX NFK 1200 Datasheet


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

www.scanlox.com

# AGILOX NFK

*Monofork*

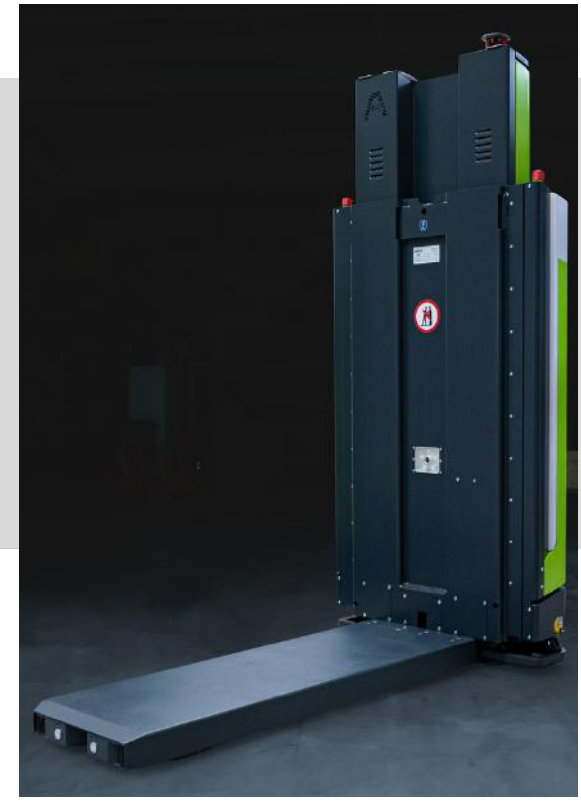
***SWARM Intelligence***

***Omnidirectional***

***Energy Efficient***

***Open Interfaces***

***Analytics***



AGILOX NFK is a monofork AMR that performs the same tasks as the AGILOX ONE with a key difference. It is designed to handle all types of load carriers without a center block.

This makes the NFK ideal for narrower load carriers, where standard fork configuration are not suitable.

## Performance Data

**620 mm**
Max. Lifting Height

**1.000 kg**
Max. Lifting Weight

**1,4 m/s**
Max. Speed

## Dimensions

**1.511 x 810 x 1.862 mm (L x W x H)**

## Specifications

**4 Omnidirectional Drives**
Drive System

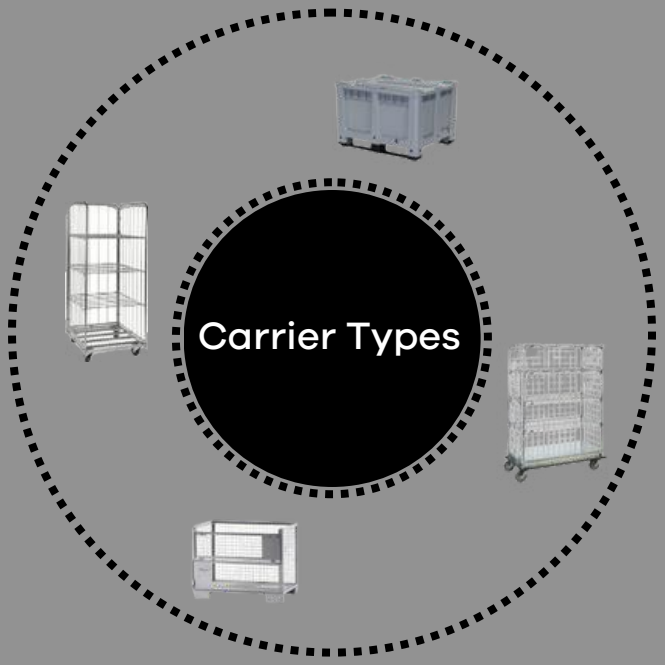
**2.100 mm**
Turning Circle

**Dual Electric Spindles**
Lift System

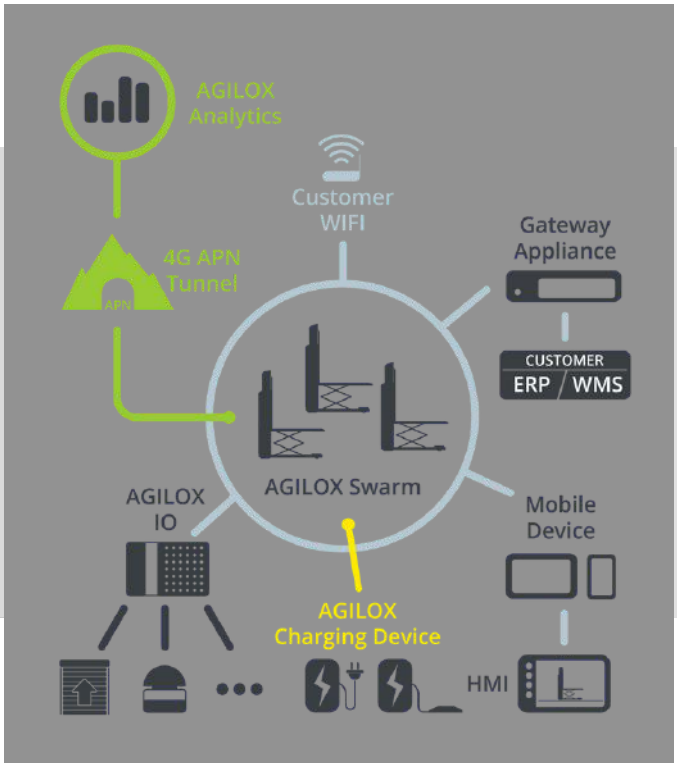
**400 kg**
Unit Weight

**LiFePO4 with BMS 3 min charging = 1 h operation**
Battery

| Specification | Details |
|---|---|
| Boxes | Plastic / wood / metal |
| 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

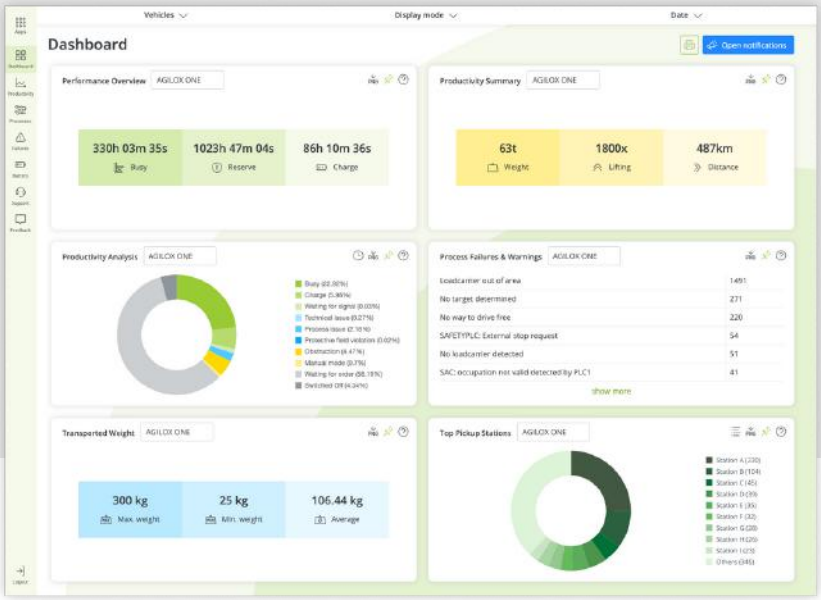
**Easy Access**
Analyze logistics data effortlessly via a browser.

**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 guarentee 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.

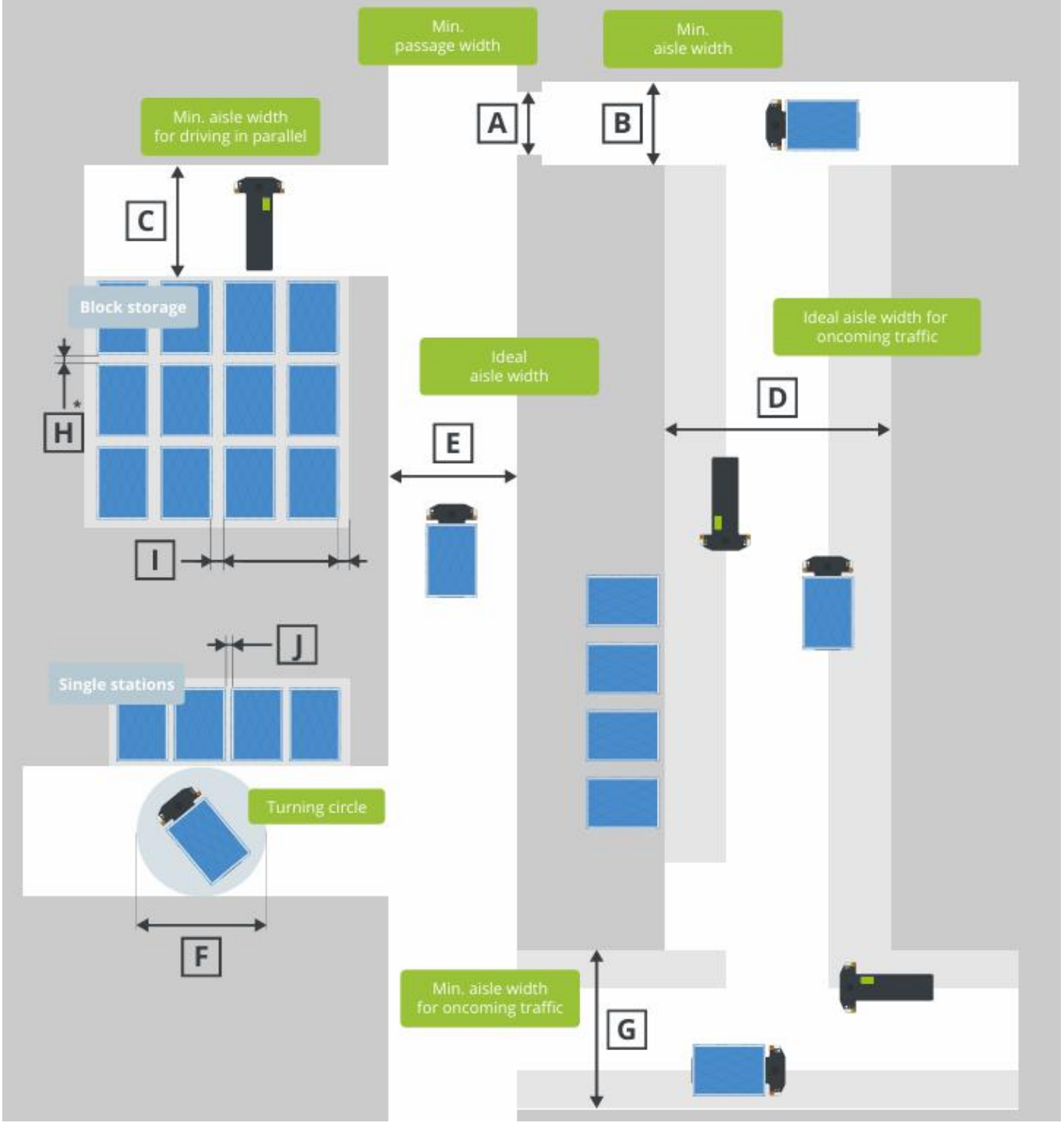
# Safety & Scanners


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

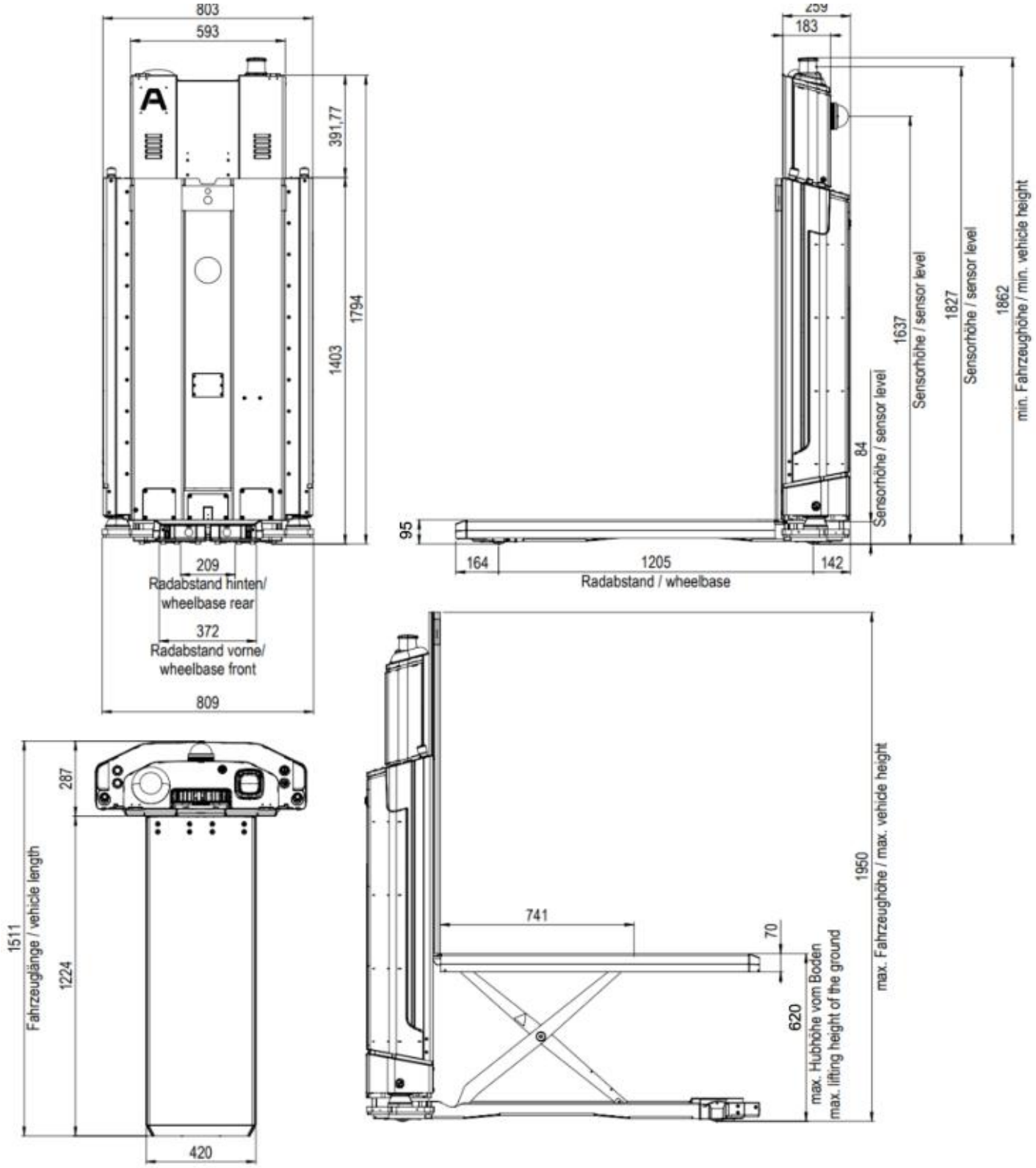
Compliance with international standards such as **ISO 3691-4 and EN1525.**

# Drive Path Design

| Load Carrier | A | B | C | D | E | F | G | H | I | J |
|---|---|---|---|---|---|---|---|---|---|---|
| Load Carrier 1200 x 800 MM 47.2 x 31.5 IN | 1400 MM 55.1 IN | 1500 MM 59.1 IN | 1800 MM 70.9 IN | 2800 MM 110.2 IN | 1800 MM 70.9 IN | 2100 MM 82.7 IN | 2600 MM 102.4 IN | 50 MM 2 IN | 200 MM 8 IN | 100 MM 4 IN |



# Dimensions


803
593
A
391,77
1794
1403
209
Radabstand hinten/
wheelbase rear
372
Radabstand vorne/
wheelbase front
809
259
183
95
164
1205
142
Radabstand / wheelbase
84
Sensorhöhe / sensor level
1637
Sensorhöhe / sensor level
1827
Sensorhöhe / sensor level
1862
min. Fahrzeughöhe / min. vehicle height
287
1511
Fahrzeuglänge / vehicle length
1224
420
741
70
620
max. Hubhöhe vom Boden
max. lifting height of the ground
1950
max. Fahrzeughöhe / max. vehicle height

# Variations

NFK 1400 | *Pictured with a load carrier*