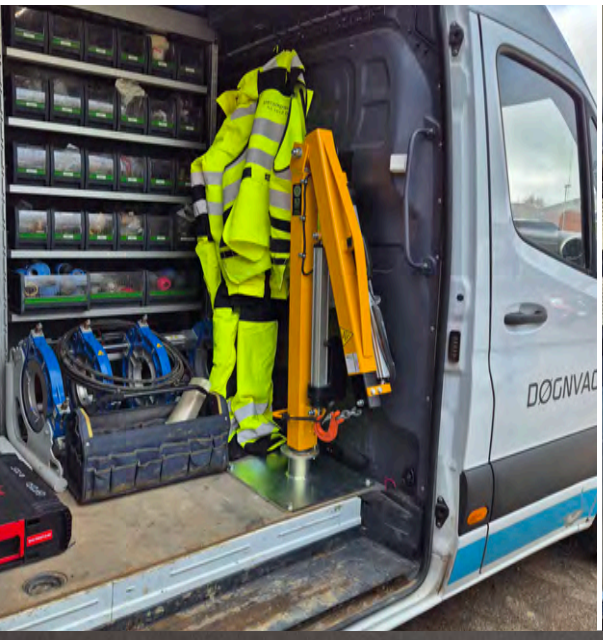
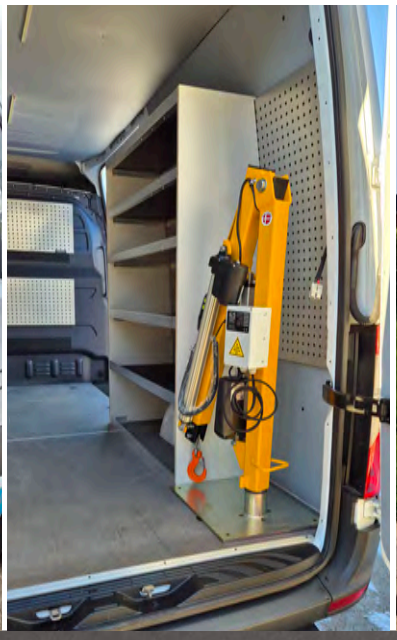
KNAP ON CRANE
ELECTRIC LIFT

ItemNo. 4600 | 4700 | 4800 | 4801

ASP
PRODUKT
UDVIKLING





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Phone: +45 98 66 92 69
E-mail: asp@asp-produkt.dk
Website: www.asp-produkt.dk

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1. Introduction

1.1. Purpose

The purpose of this user manual is to ensure correct installation, operation, handling, and maintenance of the Knap On Crane. The crane is equipped with an electric hoist and designed to lift machinery and tools. The Knap On Crane can be mounted in vans, flatbed trucks, trailers, and many other types of vehicles and platforms.

1.2. Availability

The user manual must be stored with the crane, where it is easily accessible to operators and maintenance personnel.

1.3. Knowledge

It is the employer's (the crane owner's) responsibility to ensure that everyone who operates, services, maintains, or repairs the equipment has read the user manual, at a minimum, the sections relevant to their work.

Additionally, all individuals who operate, service, maintain, or repair the equipment are themselves obligated to seek information in the user manual.

1.4. Version

This user manual is a translation of the original Danish user manual, version 02.01.

1.5. Manufacturer

ASP Produktudvikling A/S is the manufacturer and producer of Knap On Crane.

ASP Produktudvikling A/S

Tolstrup Byvej 7, DK-9600 Aars

Phone: +45 98 66 92 69

asp@asp-produkt.dk

www.asp-produkt.dk

2. Overview and Application

2.1. General Description

Do not attempt to modify or adapt the product for any use other than what is described in the user manual. Any modification or change in use will void all warranties and liability from the manufacturer.

2.2. Purpose and Intended Use of the Machine

The Knap On Crane is designed for lifting materials and tools in and out of vans, flatbed trucks, and trailers. It may also be used for lifting in other locations, provided a suitable mounting product from ASP Produktudvikling A/S is used.

2.2.1. Prohibited Use

The Knap On Crane must NOT be used for lifting people.

3. Safety and Residual Risks

This crane is manufactured in accordance with national and international standards and safety requirements. Therefore, repairs must only be carried out by an authorized service technician, and original spare parts must always be used. Otherwise, repairs may pose a danger to the user.

3.1. Safety Measures to Be Taken by the User

No persons may be present within the equipment's working area during lifting operations.

Always use the required personal protective equipment when handling the Knap On Crane. Safety footwear is recommended when using the Knap On Crane.

3.2. Intended Use and Warnings About Hazardous Situations

The Knap On Crane must only be used with original accessories and spare parts in correctly mounted condition. Never use the product with parts other than those supplied with it or specifically adapted for the purpose by ASP Produktudvikling A/S.

Never attempt to modify or adapt the product for any use other than what is described in the user manual. Any modification or change in use will void all warranties and liability from the manufacturer.

During use, the operator must be alert to changes in function and ensure that any damage is repaired before using the Knap On Crane again.

If lifting objects that exceed the crane's lifting

capacity, the crane will automatically stop. The hook can then only be lowered to relieve the load.
The crane must not be used for lifting people. No person may be present within the crane's reach during lifting operations.

3.3. Risk of Motor Damage

The product must NEVER be connected to 110V or 230V AC. This poses a risk of serious motor damage.

4. Before Use

It is the user's responsibility to ensure that the Knap On Crane, including the electric hoist, electric extension, and wire, is not damaged before use begins.
Check that the wire is properly wound onto the drum.
The ball bearings on the base axle must be checked for cracks and play.
If the user manual prescribes additional inspection points, it is likewise the user's responsibility to carry them out.
The user must ensure that the crane is used correctly and not loaded beyond its specified capacity.
If lifting goods, they must be properly secured and balanced.
If the user feels unsafe during operation, the Knap On Crane must be stopped immediately by disconnecting the power or halting operation.
The control unit's functionality must be checked. When the control arm is activated, the crane must respond correctly.

5. Operation

1. The vehicle on which the crane is mounted must be as level as possible, as tilting can affect the crane arm's swing.
2. Place the crane in the mounted base plate and lock it in place.
3. Connect the crane to the vehicle's 12V battery.
4. Raise the boom arm to the desired position using the remote control. Ensure the electric cable is not pinched.
5. When lowering the lifting hook, gently pull it to ensure proper unwinding of the wire and to check the crane's swing.
6. Once the load is in place, raise the lifting hook completely. Gently pull the hook during winding to ensure proper wire guidance.
7. After the task is completed, lower the boom arm and fold the crane.
8. Lock the crane to prevent rotation.
9. During transport, the crane must be secured in accordance with applicable legislation.

6. Training

6.1. Operators

Only operators or personnel who have read the user manual are permitted to operate the crane.

7. Technical Data

7.1. Technical Specifications

See *appendix* for dimensions and lifting diagram.

The Knap On Crane Electric Lift is available with a remote control featuring a flexible cable.

Model 4600 comes with a fixed-mounted chain and electric extension.

Figur 1. Remote Control Model 4600

Model 4700 features a wire hoist and manual extension.

Figur 2. Remote Control Model 4700

Model 4800 features a wire hoist and electric extension.

Figur 3. Remote Control Model 4800

7.2. Machine Designation

The full designation of the machine is *Knap On Crane Electric Lift*.

7.3. Machine Label

The machine label is located on the electrical box.

7.4. Noise

The equipment operates below 70 dB(A).

7.5. Service Life

> 10 years.

Regular service and maintenance will extend the equipment's lifespan. Additionally, the mandatory 12-month inspection must be observed and carried out by ASP Produktudvikling A/S or an official service partner.

8. Handling, Transport and Installation

8.1. Transport

During transport, the equipment must always be folded as compactly as possible. The crane must always be locked into the base plate to prevent rotation. During transport, the crane must be secured in accordance with applicable legislation.

8.2. Mounting and Installation

Mounting requirements:

- The base plate must be bolted with a minimum of 4 pcs Ø12 mm bolts of grade 8.8.
- The base plate must be mounted to the vehicle or trailer's load-bearing beams to ensure proper force distribution into the chassis.
- On vehicles with a weak base, reinforcement around the base plate area is necessary.
- It is the installer's responsibility to test the fastening and any bending of the bed/base under full crane load.

Two types of base plates depending on mounting type:

1. **Downward fastening**: used where mounting through the floor is possible, e.g., wooden trailer beds or flatbed trucks.
2. **Upward fastening**: used where drilling through the floor is not allowed, e.g., steel floors in vans or pickups.

Important:

- All fastening bolts must be re-tightened no later than one month after commissioning.
- When extending the power cable, the positive lead (red) must be at least 10 mm^2 to avoid voltage drop and reduced crane performance.

- Red (positive) and black (negative) must never be reversed, as this may deactivate the crane's safety function.

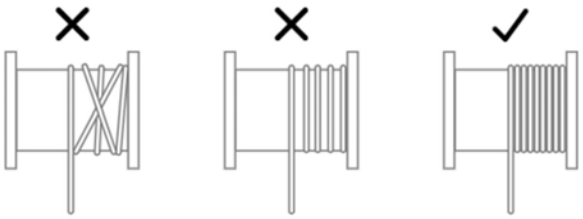
8.3. Maintenance

Disassembly and repair of the crane must only be performed by a technically skilled and properly trained person.
The electric hoist is virtually maintenance-free. For long and trouble-free operations, the following is recommended at least every 6 months:

- Retighten wheel and bolt assemblies.
- Check the crane, cables, hook, and wire for damage and wear.

8.3.1. Wire

- The wire or chain must be regularly inspected for breaks and wear and should generally be replaced once a year or more often if needed.
- Always use original wire.
- To extend its lifespan, it is recommended to lubricate the wire regularly with wire oil.
- No more than 18 meters of wire may be wound onto the drum.
- Always ensure that at least 3 full wire windings remain on the drum during use.
- Protect the equipment from frost and low temperatures, which can affect function and safety.
- Before each use, check that the wire is properly wound, the hoist is correctly mounted, and the control unit functions flawlessly.



Figur 4. Illustration of Correct Wire Winding

8.3.2. Base Axle and Ball Bearings

- The ball bearings on the base axle must be regularly checked for cracks and play.
- To ensure optimal operation and lifespan, it is recommended to lubricate the bearings with bearing grease as needed.

8.3.3. Cleaning

Clean with water mixed with mild soap and a well-wrung cloth. Avoid cleaning with running water.
Do not use solvents or cleaning agents containing abrasive particles.
Maintenance primarily consists of regular inspection of the wire, ensuring bolt assemblies are tight, and checking individual parts for damage and wear.
Worn or damaged parts must be replaced before the crane is used again.

8.3.4. Storage

If the Knap On Crane is not to be used for an extended period, it should be folded and covered, preferably with our protective cover. The crane must be stored in a dry place at room temperature to ensure optimal function and extend its lifespan.

9. End of Use

9.1. Disposal and Environmental Considerations

Oil residues are the only part of the Knap On Crane considered environmentally hazardous and must be disposed of in accordance with current regulations set by local environmental authorities.
All other parts can be disposed of as metal and electronic waste.

9.2. Environment and Responsible Recycling

At ASP Produktudvikling, we take responsibility for the environment. That's why we offer to take back our products free of charge when a customer no longer needs them. Cranes and equipment that are still functional are inspected, serviced, and refurbished to extend their lifespan. This way, we save resources and reduce waste while giving products several more years of use.
We believe that quality and sustainability can go hand in hand.

10. Service

Service, spare parts, and mandatory annual inspections are carried out at the following address:

ASP produktudvikling A/S
Tolstrup Byvej 7, DK-9600 Aars
Or
At an official service partner.

We perform the mandatory 12-month service inspection on all our cranes and lifting equipment.
With an inspection, you ensure that the equipment is safe, operational, and compliant with current regulations.

11. Kontaktoplysninger

ASP Produktudvikling A/S
Tolstrup Byvej 7
DK-9600 Aars
Phone: 98 66 92 69
E-mail: asp@asp-produkt.dk
www.asp-produkt.dk
CVR: 32 27 83 29

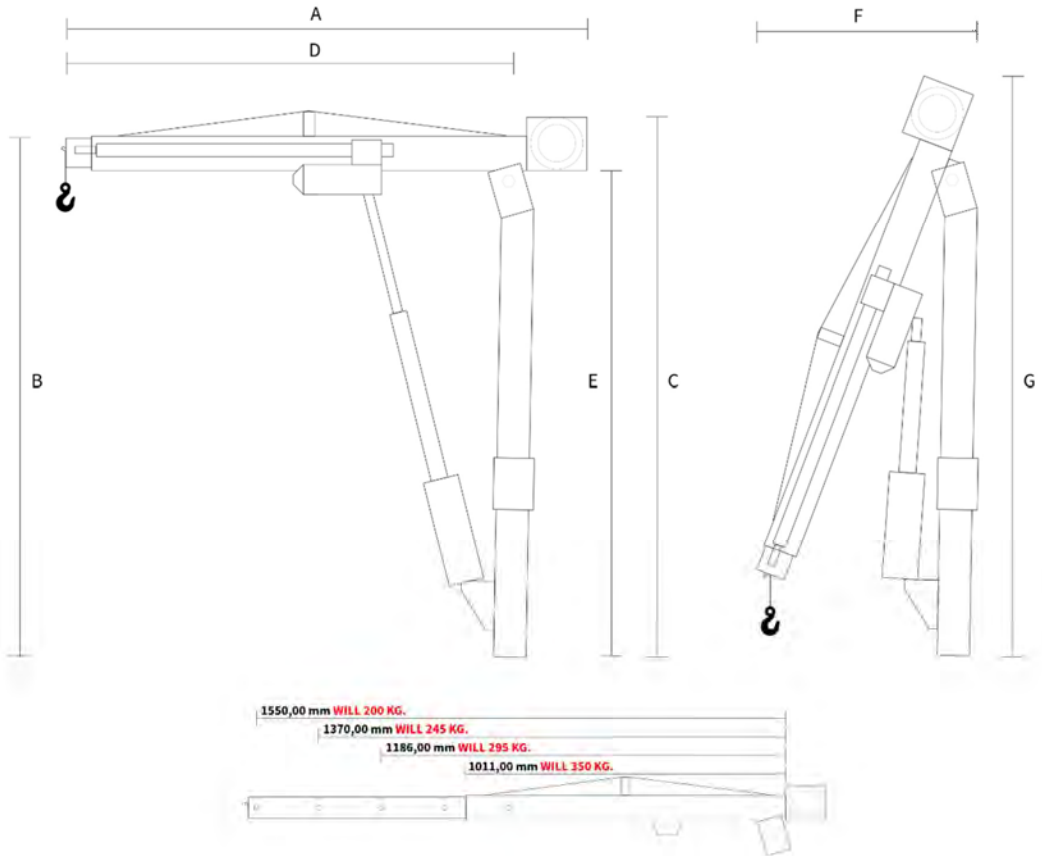
12. Disclaimer

The user of the item on which the crane is mounted is responsible for ensuring that the "item" has sufficient strength and can

withstand daily use as well as the additional load of 100 kg during a load test. Should damage occur to the vehicle or trailer bed, springs, etc., during the load test or use of the Knap On Crane, ASP Produktudvikling and its authorized dealers/installers disclaim any liability.

13. Appendix

13.1. Technical Specifications



	Item No.	4600	4700	4800
A	Length (mm)	1010	1185	1185
B	Maximum Boom Height (mm)	1710	1340	1340
C	Maximum Height (mm)	1110	1170	1170
D	Center Axis Length (mm)	960	980	980
E	Tower Height (mm)	1090	1100	1100
F	Folded Width (mm)	510	440	440
G	Folded Height (mm)	1140	1275	1275
	Lifting Capacity (kg)	350	350	350
	Maximum Extension (mm)	500	600	500
	Wire Length (m)	-	14	14
	Weight (kg)	32	36	38
	Voltage/Consumption	12V, max 27A	12V, max 57A	12V, max 57A
	Hoist	Fixed Chain	Electric hoist	Electric hoist
	Extension	Electric	Manual	Electric

*The stated measurements are indicative, as our products are often customized to meet specific customer requirements. Please contact us for exact specifications tailored to your solution. *Prices are excluding VAT and shipping*

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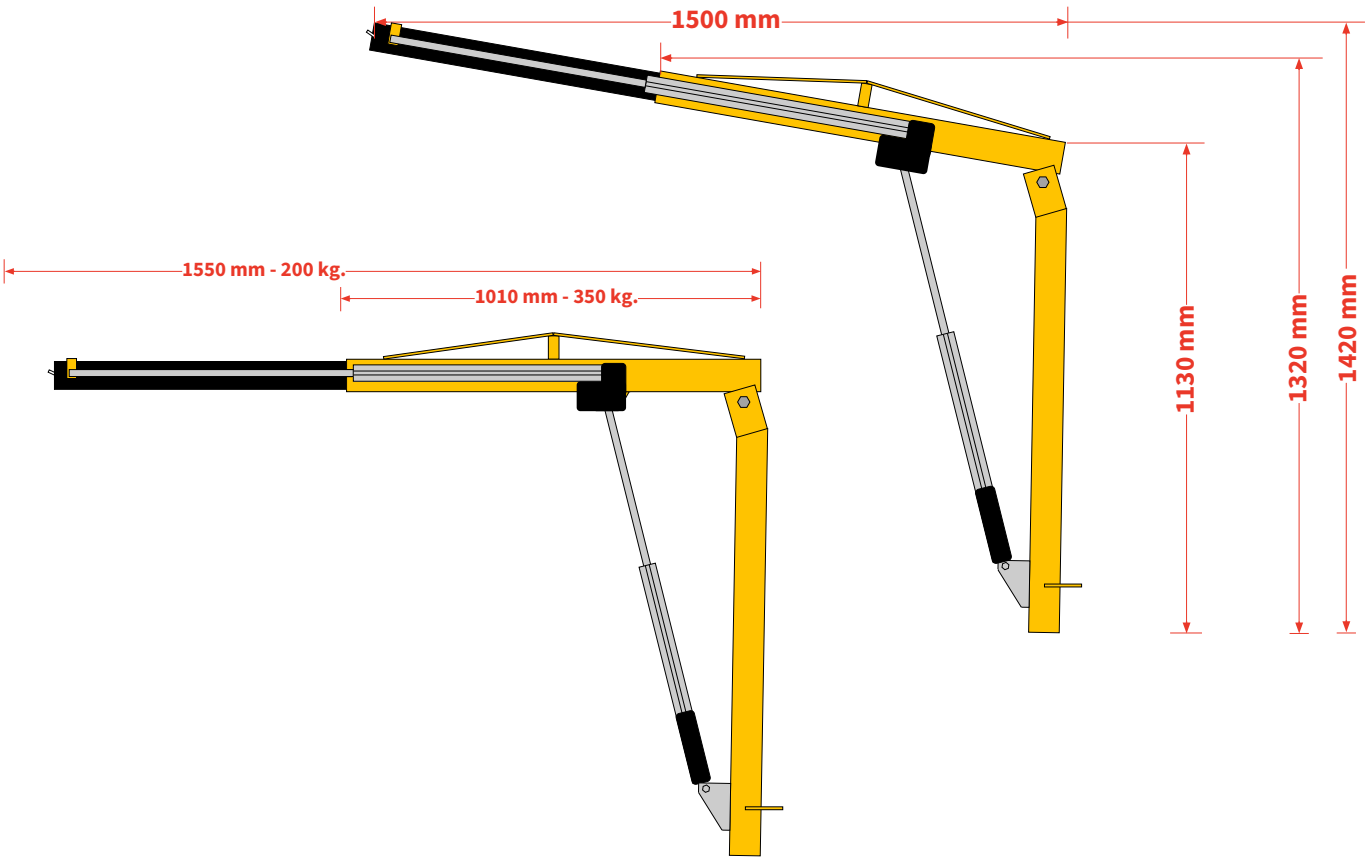

Knap On Crane Electric Lift

A robust and user-friendly solution featuring an electric lifting motor, electric boom extension, and a fixed chain. Operated via a wired remote control with flexible cable. The crane occupies minimal space in the cargo area and features a low slewing radius.

Specifications	
Item No.	4600
Width folded (mm)	510
Height folded (mm)	1140
Voltage/Consumption	12V, max 57A
Lift	Fixed chain
Extension	Electric
Weight (kg)	32

- Lifting capacity: 350 kg
- Portable without the use of tools
- Connects to the vehicle's 12V battery
- CE approved

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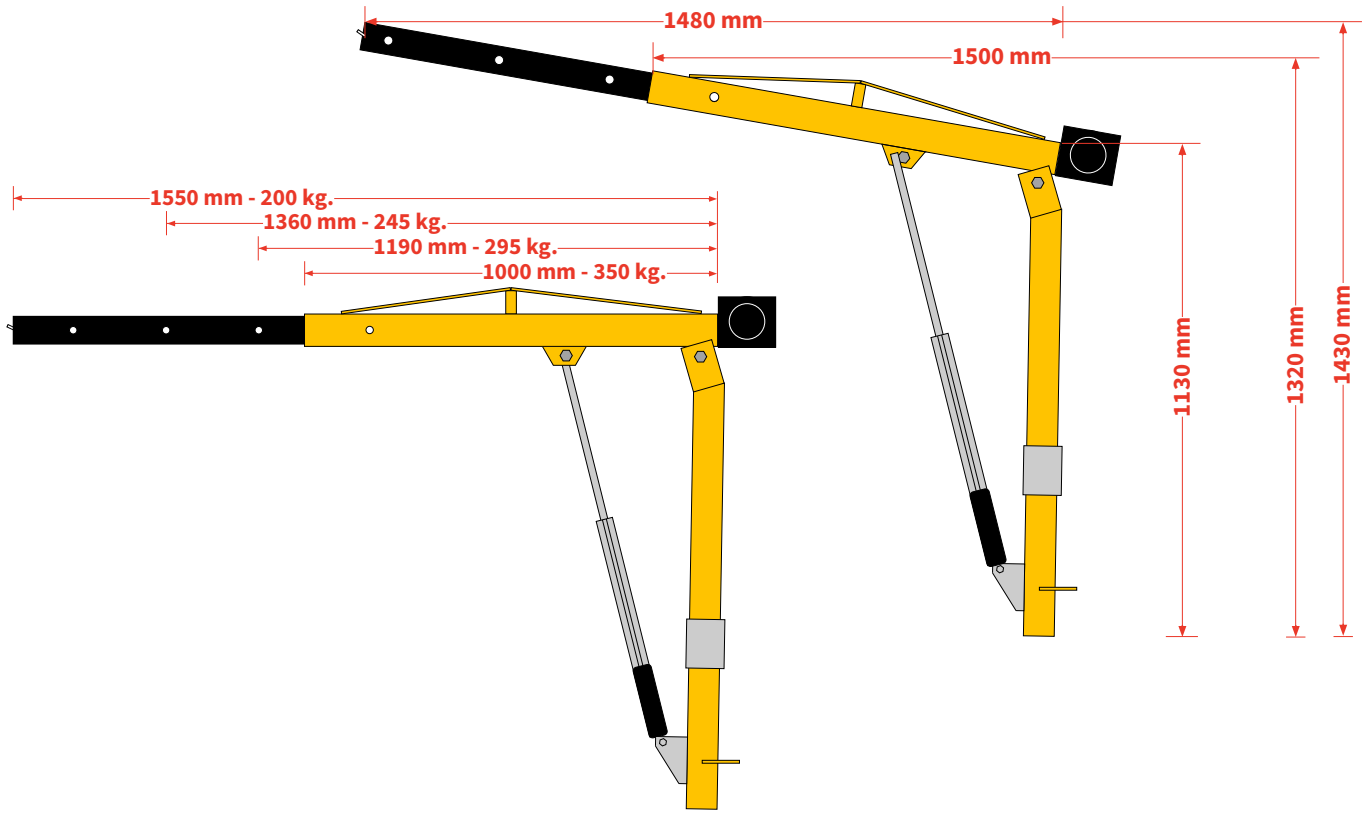

Knap On Crane Electric Lift

A robust and user-friendly solution with an electric lifting motor, manual boom extension, and 14-metre wire hoist. Operated via a wired remote control with flexible cable. Does not require the vehicle engine to idle during operation.

Specifications	
Item No.	4700
Width folded (mm)	440
Height folded (mm)	1275
Voltage/Consumption	12V, max 57A
Lift	Electric wirehoist
Extension	Manual
Weight (kg)	36

- Lifting capacity: 350 kg
- Portable without the use of tools
- Connects to the vehicle's 12V battery
- CE approved

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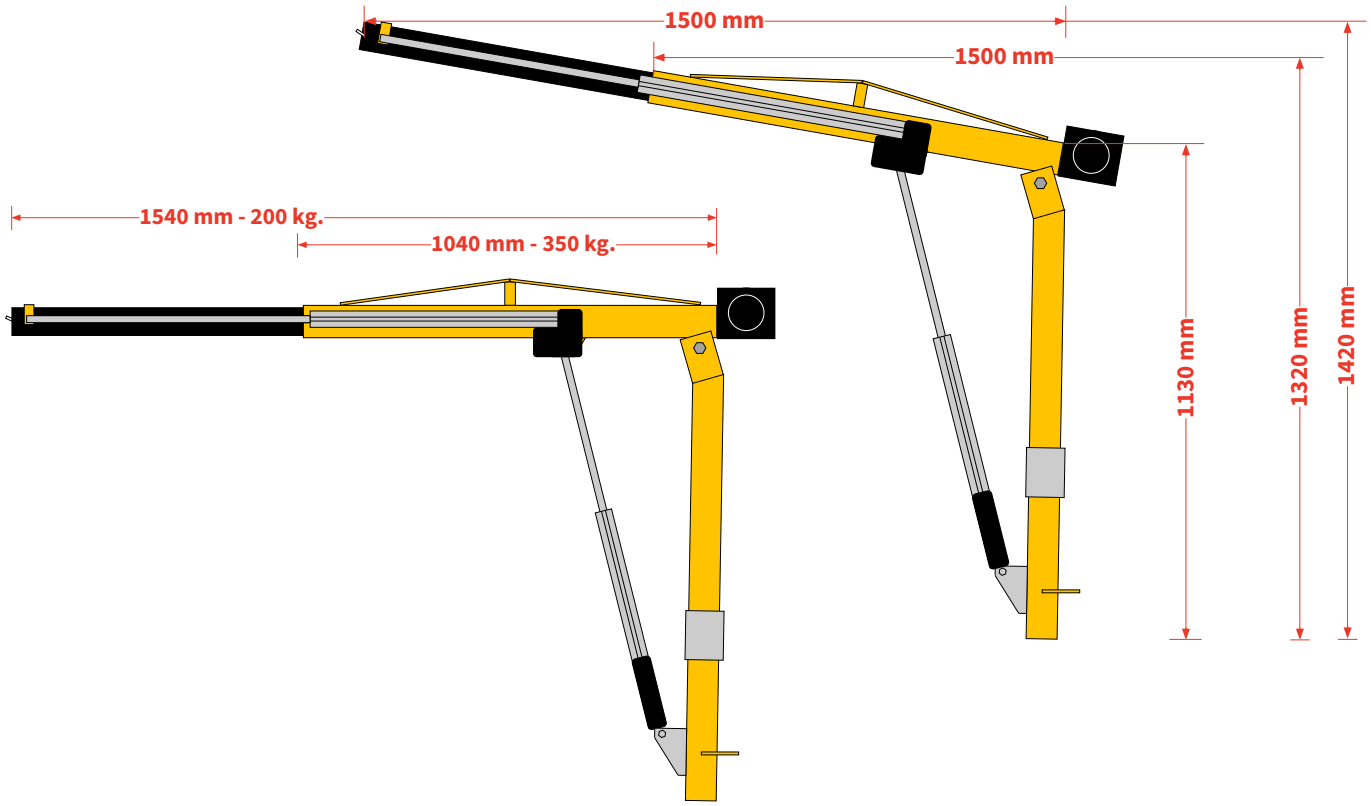

Knap On Crane Electric Lift

A robust and user-friendly solution featuring an electric lifting motor, electric boom extension, and 14-metre wire hoist. Operated via a wired remote control with flexible cable. Does not require the vehicle engine to idle during operation.

Specifications

Item No.	4800
Width folded (mm)	440
Height folded (mm)	1275
Voltage/Consumption	12V, max 57A
Lift	Electric wirehoist
Extension	Electric
Weight (kg)	38

- Lifting capacity: 350 kg
- Portable without the use of tools
- Connects to the vehicle's 12V battery
- CE approved

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