



ROTATOR

ELFRA/ELFSRA - ELFR/ELFSR
SELFRA/SELFSA - SELFR/SELFSR



ADJUSTABLE BOX HOLDERS

NON-ADJUSTABLE BOX HOLDERS

MULTIPURPOSE CARRIAGE

Rotator - lift and rotate boxes and crates

The rotator has two main purposes: to boost productivity by tilting and emptying boxes and crates; and to improve the workplace ergonomics.

To boost productivity, the 360° rotate function enables a complete emptying of the boxes. The box holders can be adjusted to your specific box widths and the rotator can be equipped with a chute to carefully transfer items from one container to another.

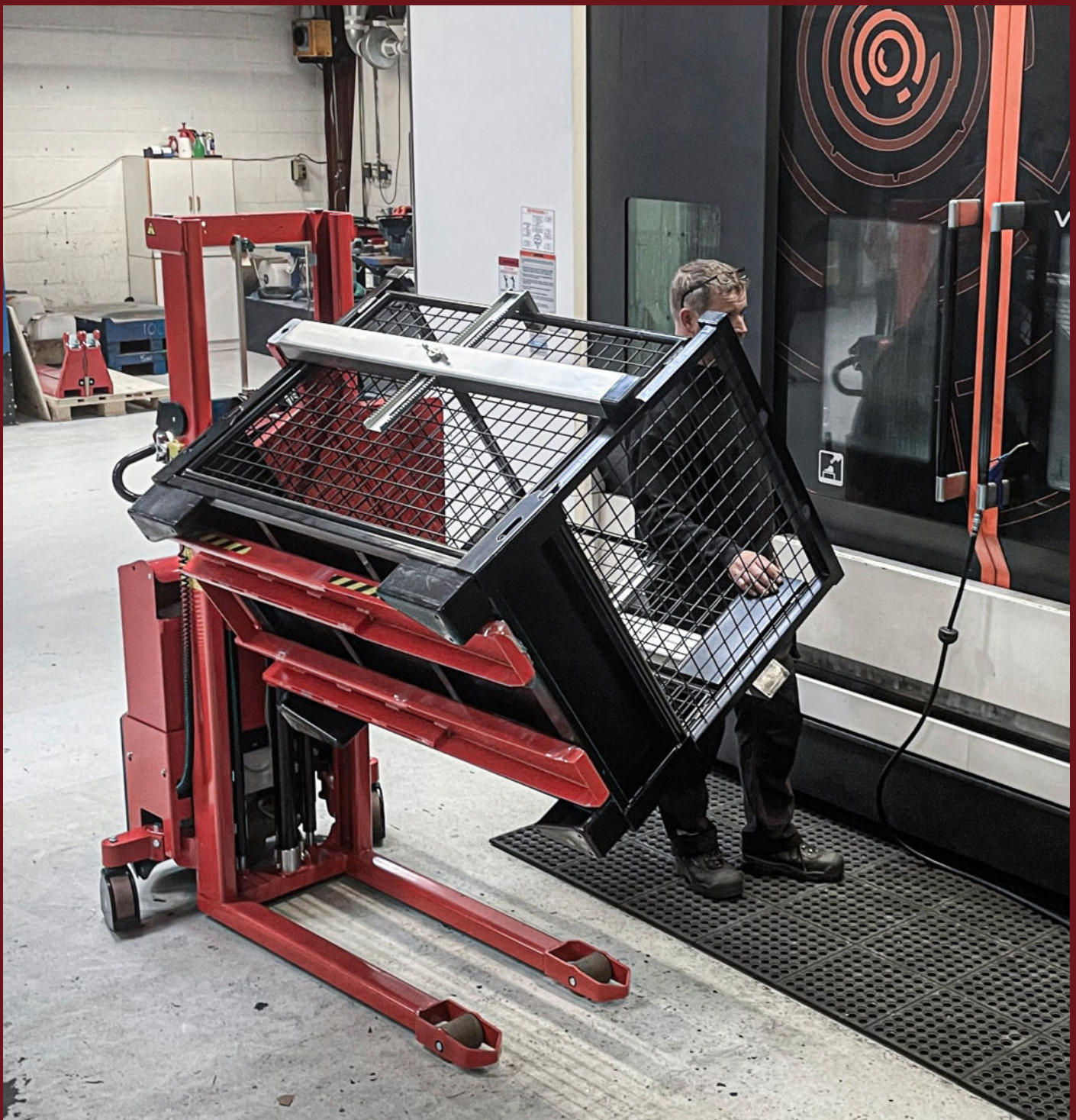
This eliminates the need for manual and physical material handling, which greatly improves workplace productivity.

To improve ergonomics, the rotator is ideal for creating ergonomically correct working positions for your employees. The lift and

rotate function enables the workers to access the contents easily in a proper working height, without having to bend down in awkward positions.

No matter a heavy or light load, repetitive physical manual processes come with high risks of strain-related injuries. By ensuring a proper working height, you can reduce the risk greatly, while also improving efficiency.

The rotator works well in all types of industries, and if you have special needs we will customise it to match your specific situation 100%.





Clamps and box holders adapted to individual needs

Controlled rotation start/stop



Intuitive screen to preset rotation angles and speed



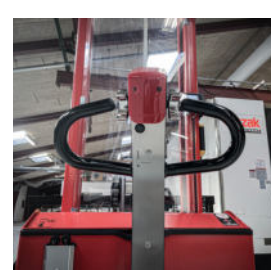
Optional extra: side support plates

Rotate function 360° (one adjustable stop in every side)



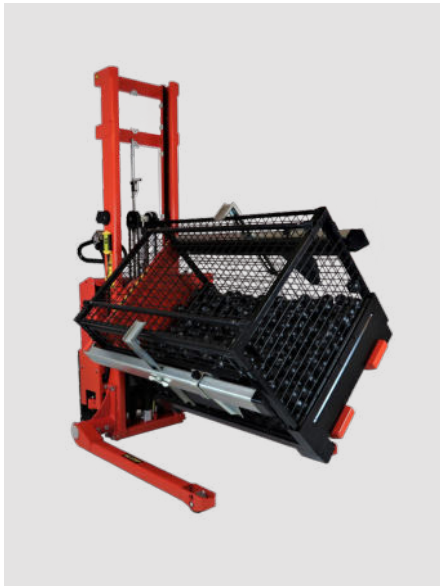
Remote control for lifting, lowering, and rotation

Low power consumption = long battery life time



Ergonomically correct handle

Rotator



Rotator with adjustable box holders



Rotator with non-adjustable box holders



Customised Rotator

Rotator with adjustable box holders (ELFRA/SELFRA - ELFSRA/SELF SRA)

Do you have boxes and crates in different sizes and dimensions? Then the rotator with adjustable box holders is the right choice for you.

The rotator is equipped with a small handle on the side, which is used to manually adjust the width between the box holders to match the dimensions of a given container.

This way you can use one machine to lift and rotate different containers.

The rotator can lift 1.000 kg. Also when rotating beyond 90°. Clamps are necessary when rotating beyond 60°.

We use a special oil for all products, which is tested in cold atmospheres down to -20 degrees C.

Rotator with non-adjustable box holders (ELFR/SELFR + ELFSR/SELF SR)

If you handle standard sized boxes or crates, you need the rotator with non-adjustable box holders.

The rotator is constructed to handle standard containers, which it can lift and rotate to either empty or to a proper working height.

Depending on your given work situation and the load of the containers, you will need one or two sets of box holders to ensure safe and efficient material handling.

With loads above 500 kg., two sets are necessary.

The rotator can lift 1.000 kg. Also when rotating beyond 90°.

	Standard features
Electric	
Hand brake	●
Remote control	●
Foot protector	●
Fully powered	
Automatic hand brake	●
Remote control	●
Foot protector	●

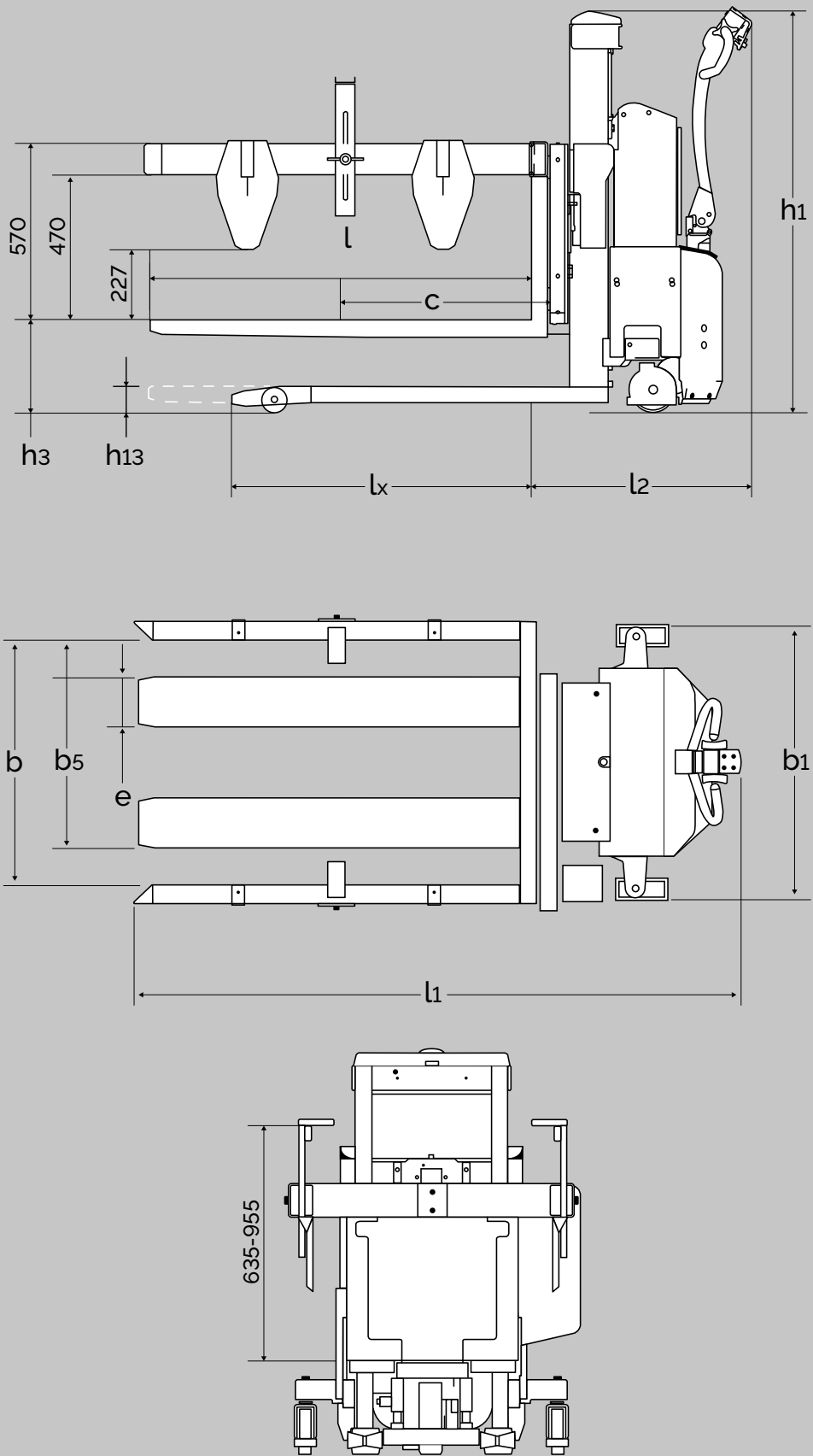
Work in practice



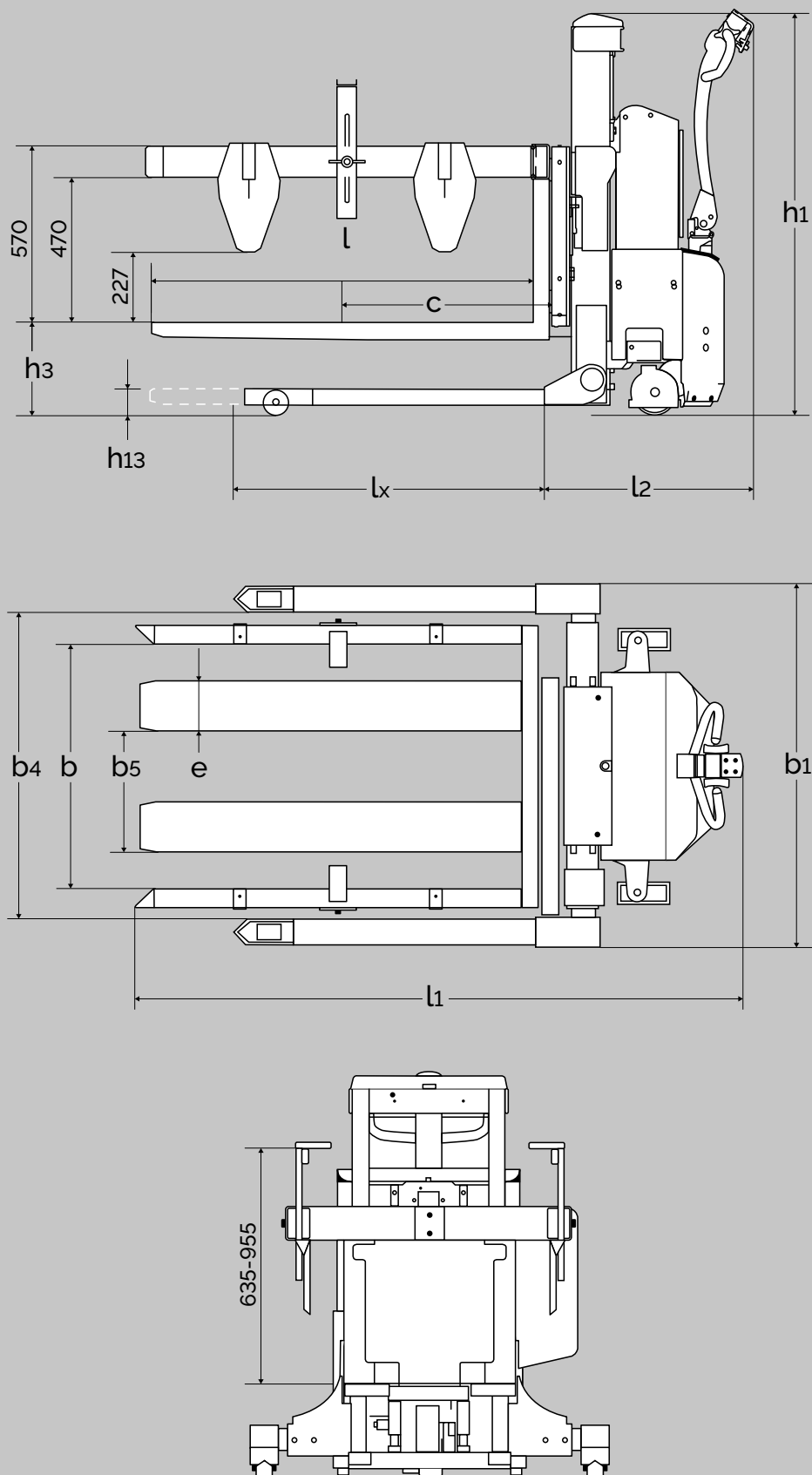
The rotator works well across all industries. The multiple options and attachments make it applicable and a valuable solution in all sorts of material handling situations. Some of our customers include:

- Bakeries - to handle large batches of dough in bakeries without manual efforts.
- Repackaging - to efficiently pour oilseeds into an industrial blender.
- Postal office - to empty large postal cages onto sorting tables without manual efforts.
- Mirror company - to ensure safe and ergonomic access to fragile mirrors in manufacturing.
- Automobile industry - to pour and transfer small components between different containers in a smart and time-efficient way.
- Food Industry/repacking candy - to empty big bins of candy into hoppers to repack contents into smaller bags.
- Pharmaceutical - to empty dry ice onto medicine.

Rotator ELFRA & SELFRA



Rotator ELFSRA & SELFSRA



		ELFRA SELFRA	ELFRA SELFRA	ELFRA SELFRA	ELFRA SELFRA	ELFRA SELFRA
PRODUCT (measured in mm)		ELFSRA SELFSRA	ELFSRA SELFSRA	ELFSRA SELFSRA	ELFSRA SELFSRA	ELFSRA SELFSRA
Capacity in kg		1000 kg*	1000 kg*	1000 kg*	1000 kg*	1000 kg*
Lifting height	h ₃	920	1200	1400	1600	1910
Fork length	l	1250				
Overall height	h ₁	1330	1530	1730	1930	2240
Overall width	b ₁	932, 890 (ELFRA / SELFRA distance between steering wheels 860 mm) / 166 + b ₄ (ELFSRA / SELFSRA)				
Witdth between legs	b ₄	314, 434 / 850-942, 942-1124, 1124-1306, 1240-1422**				
Fork span	b ₅	560, 680				
Length without forks	l ₂	590, 605 / 590, 703				
Overall length with 1250 forks	l ₁	2000, 1955 / 2000, 1955				
Lowered height, forks	h ₁₃	85, 90 / 85, 90	90			
Load centre	c	1/2				
Fork width	e	163				
Run-in length	l _x	1040				
Gangway (pallet 1200 x 800)	A _{st}	2290***, 2200*** / 2290***, 2200***				
Turning angle of wheels		180°, 210° / 180°, 210°				
Motor		SELFRA / SELFSRA 1,2 kW 24 V speed control electronically variable				
Driving speed with/without load		SELFRA / SELFSRA below 500 mm lift: 5/6 km/h, over 500 mm lift: 3/4 km/h				
Pump motor		1,1 kW - 12 V / 1,2 kW - 24 V				
Lifting speed with/without load		ELFRA / ELFSRA 0,05/0,07 m/s, SELFRA / SELFSRA 0,07/0,12 m/s				
Lowering speed with/without load		ELFRA / ELFSRA 0,12 m/s / 0,04 m/s, SELFRA / SELFSRA 0,12 m/s / 0,07 m/s				
Max torque		700 Nm				
Tilt function		360° (with one adjustable stop in every side) (Standard 45° to every side)				
Tilt area		Forks 400-900 (h ₃)				
Tilt time (0-180°)		Minimum 30 sec (adjustable)				
Electric motor for tilt function		ELFRA / ELFSRA 12 V - 24 A SELFRA / SELFSRA 24 V - 12 A				
Motor specifications		0,2 kW, 3000 r/m Permanent magnet motor, IP 44, class F. Gear 1:228				
Operation		Not continuously (S2-10 min)				
Weight in kg (without battery)		372, 501 / 432, 561 kg	391, 520 / 451, 580 kg	397, 526 / 457, 586 kg	401, 530 / 461, 590 kg	409, 538 / 469, 598 kg
Adjustable box holders with/without clamps (optional extra)	b	The box holders can be adjusted for box widths from 800 to 1200 mm Box holders with clamps can hold boxes of heights between 635 and 955 mm, when tilted				

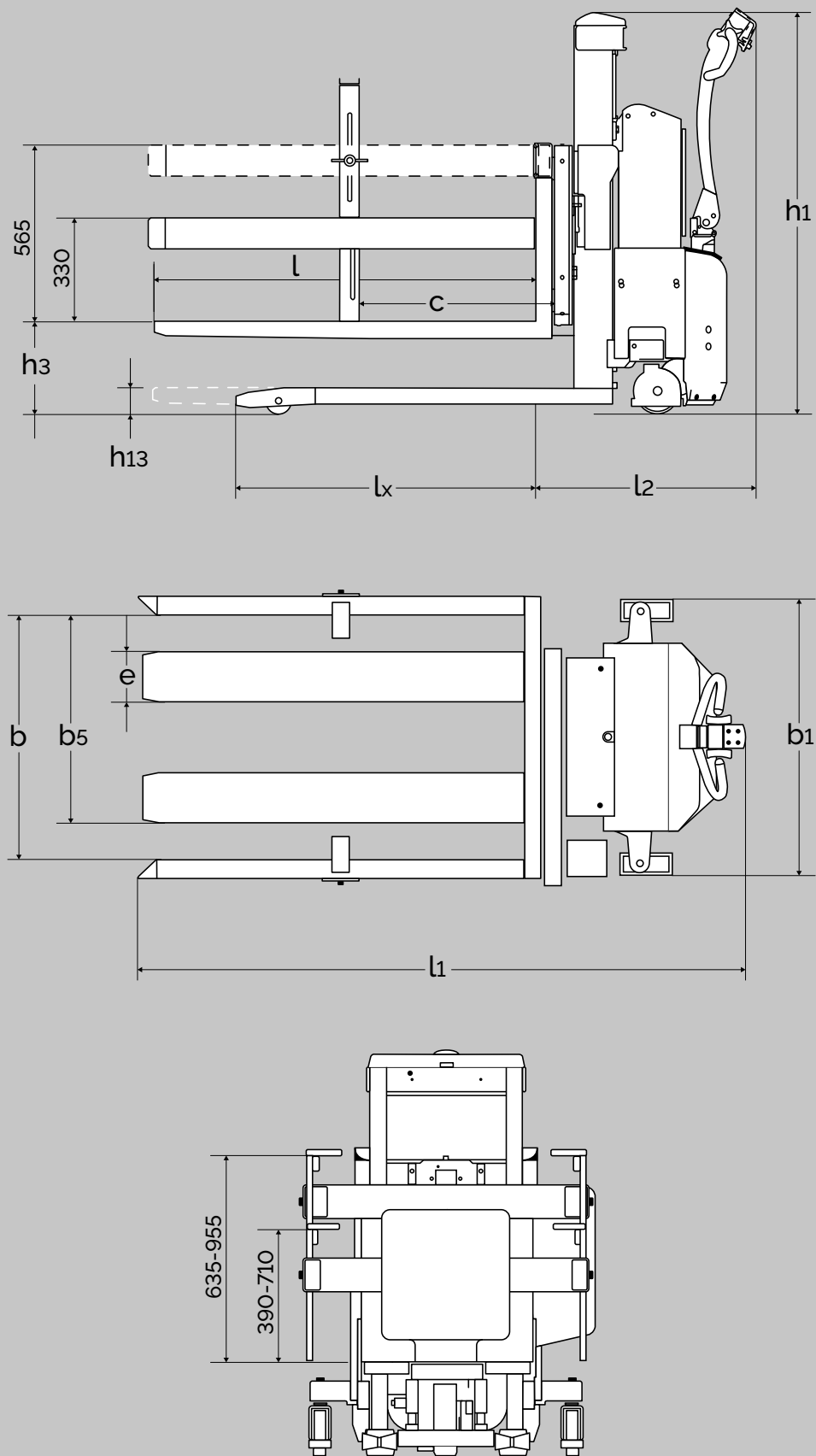
* Maximum 1000 kg when the load centre is maximum 80 mm from the rotation centre.

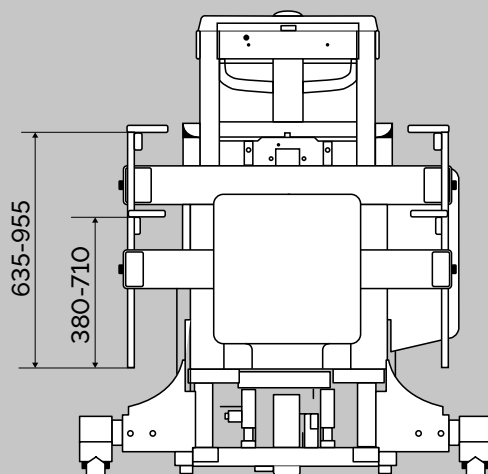
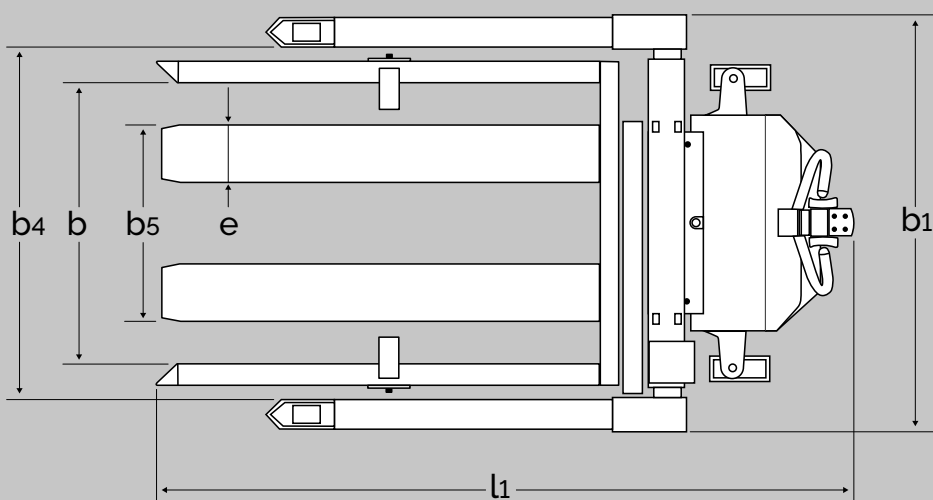
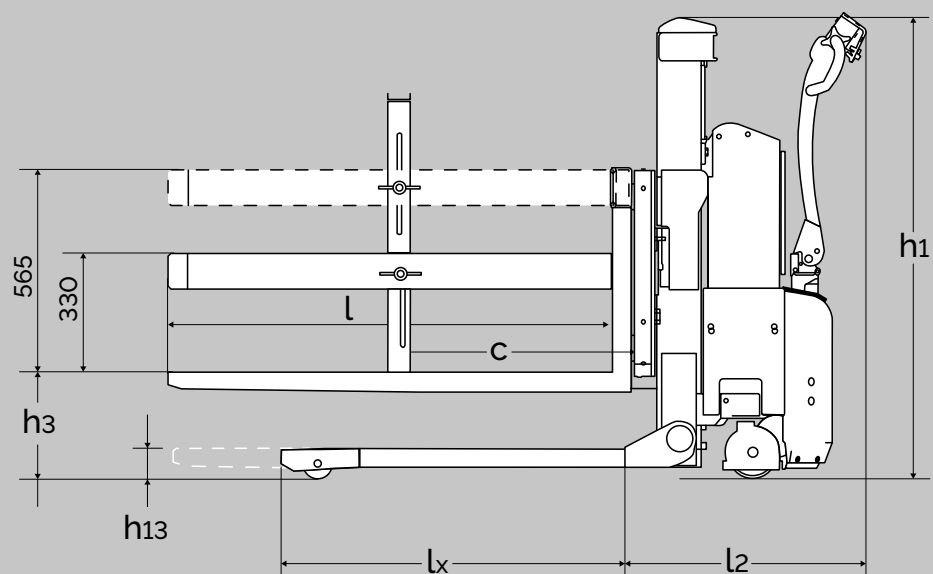
The load capacity that can be tilted is reduced, the larger the distance is between load centre of the load and rotation centre.

** Width between straddle legs of more than 1306 mm, max. capacity 800 kg.

*** Tests show that 1700 mm is enough (on straddle model it depends on width between the straddle legs).

Rotator ELFR & SELFR





PRODUCT (measured in mm)		ELFR SELFR ELFSR SELFSR	ELFR SELFR ELFSR SELFSR	ELFR SELFR ELFSR SELFSR	ELFR SELFR ELFSR SELFSR	ELFR SELFR ELFSR SELFSR
Capacity in kg		1000 kg*	1000 kg*	1000 kg*	1000 kg*	1000 kg*
Lifting height	h ₃	920	1200	1400	1600	1910
Fork length	l	1250				
Overall height	h ₁	1330	1530	1730	1930	2240
Overall width	b ₁	932, 890 (ELFR / SELFR distance between steering wheels 860 mm) / 166 + b ₄ (ELFSR / SELFSR)				
Witdth between legs	b ₄	314, 434 / 850-942, 942-1124, 1124-1306, 1240-1422**				
Fork span	b ₅	560, 680				
Length without forks	l ₂	590, 605 / 590, 703				
Overall length with 1250 forks	l ₁	2000, 1955 / 2000, 1955				
Lowered height, forks	h ₁₃	85, 90 / 85, 90	90			
Load centre	c	1/2				
Fork width	e	163				
Run-in length	l _x	1040				
Gangway (pallet 1200 x 800)	A _{st}	2290***, 2200*** / 2290***, 2200***				
Turning angle of wheels		180°, 210° / 180°, 210°				
Motor		SELFR / SELFSR 1,2 kW 24 V speed control electronically variable				
Driving speed with/without load		SELFR / SELFSR below 500 mm lift: 5/6 km/h, over 500 mm lift: 3/4 km/h				
Pump motor		1,1 kW - 12 V / 1,2 kW - 24 V				
Lifting speed with/without load		ELFR / ELFSR 0,05/0,07 m/s, SELFR / SELFSR 0,07/0,12 m/s				
Lowering speed with/without load		ELFR / ELFSR 0,12 m/s / 0,04 m/s, SELFR / SELFSR 0,12 m/s / 0,07 m/s				
Max torque		700 Nm				
Tilt function		360° (with one adjustable stop in every side) (Standard 45° to every side)				
Tilt area		Forks 400-900 (h ₃). Multi-purpose carriage 680-1180 from floor to rotation centre				
Tilt time (0-180°)		Minimum 30 sec (adjustable)				
Electric motor for tilt function		ELFR / ELFSR 12 V - 24 A SELFR / SELFSR 24 V - 12 A				
Motor specifications		0,2 kW, 3000 r/m Permanent magnet motor, IP 44, class F. Gear 1:228				
Operation		Not continuously (S2-10 min)				
Weight in kg (without battery)		372, 501 / 432, 561 kg	391, 520 / 451, 580 kg	397, 526 / 457, 586 kg	401, 530 / 461, 590 kg	409, 538 / 469, 598 kg
Box holder with/without clamps (optional extras)		For box widths of 800, 850 or 1000 mm by a fork span of 560 mm. For box widths of 1000, 1050 or 1200 mm by a fork span of 680 mm. Special arrangements for a maximum box width of 1400 mm are possible. Box holders with clamps can hold boxes of heights between 390 and 955 mm, when tilted.				

* Maximum 1000 kg when the load centre is maximum 80 mm from the rotation centre.

An extra set of box holders is necessary when lifting 500-1000 kg.

The load capacity that can be tilted is reduced, the larger the distance is between load centre of the load and rotation centre.

** Width between straddle legs of more than 1306 mm, max. capacity 800 kg.

*** Tests show that 1700 mm is enough (on straddle model it depends on width between the straddle legs).