

ROTATOR

ELFRA/ELFSRA - ELFR/ELFSR
SELFRA/SELFSRA - 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 with adjustable box holders

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°.



Rotator with non-adjustable box holders

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°.



Rotator with multi-purpose carriage

With this solution you can attach your own tools to the rotator and ease your daily work.

This rotator comes without attachments, and instead you attach your own piece of equipment to it. This way you can use the rotator for exactly what you need.

The multi-purpose carriage can rotate 360° and has the same features as the standard rotator.

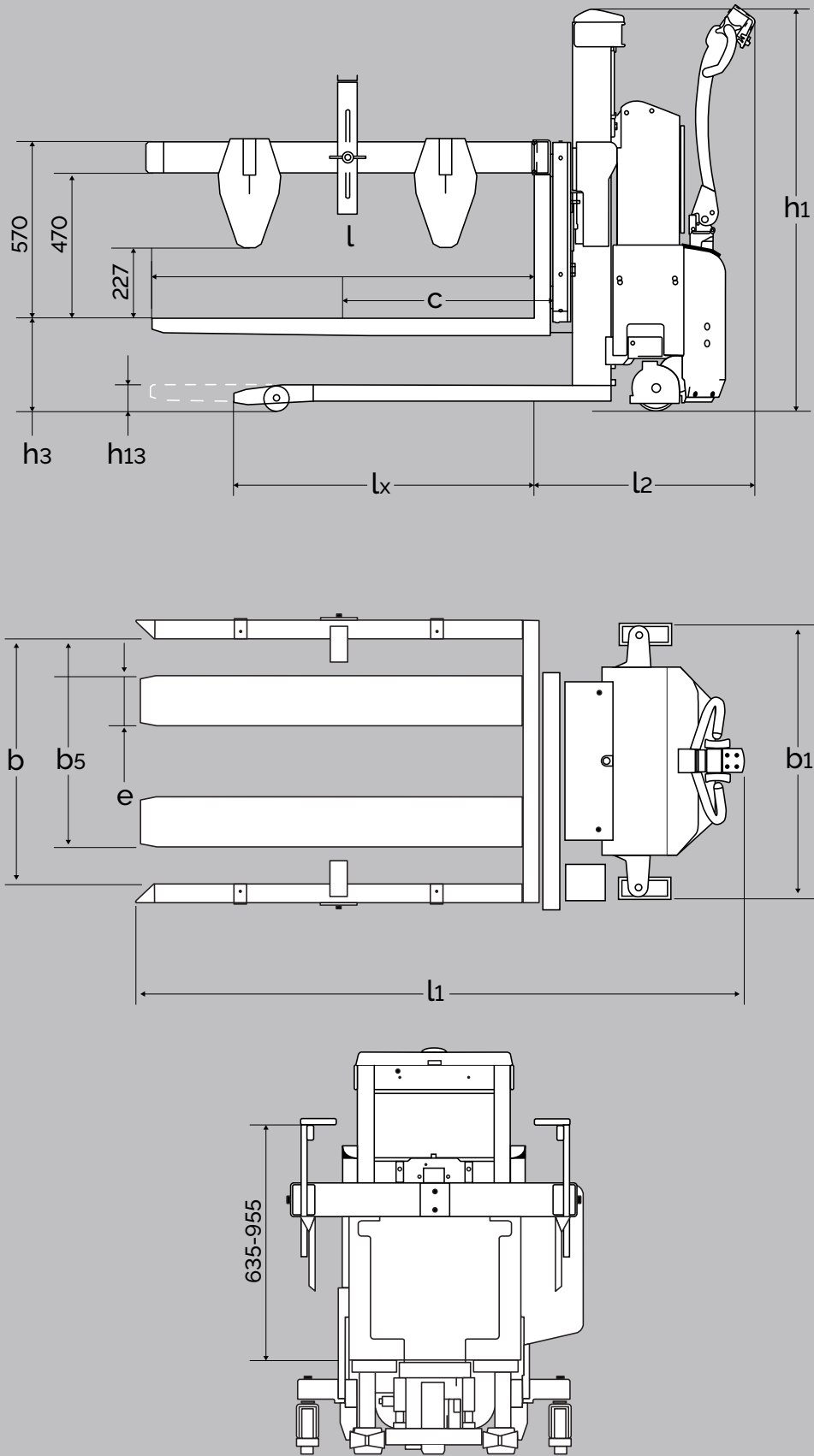
All versions of the Rotator are available with standard or straddle legs.

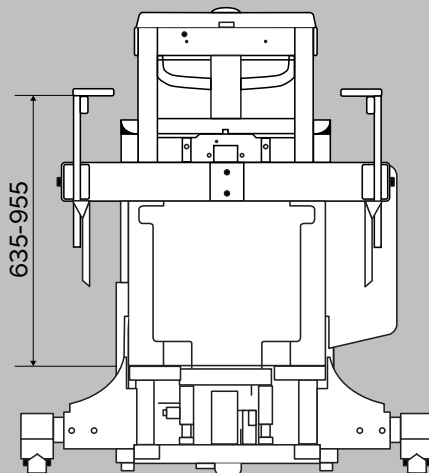
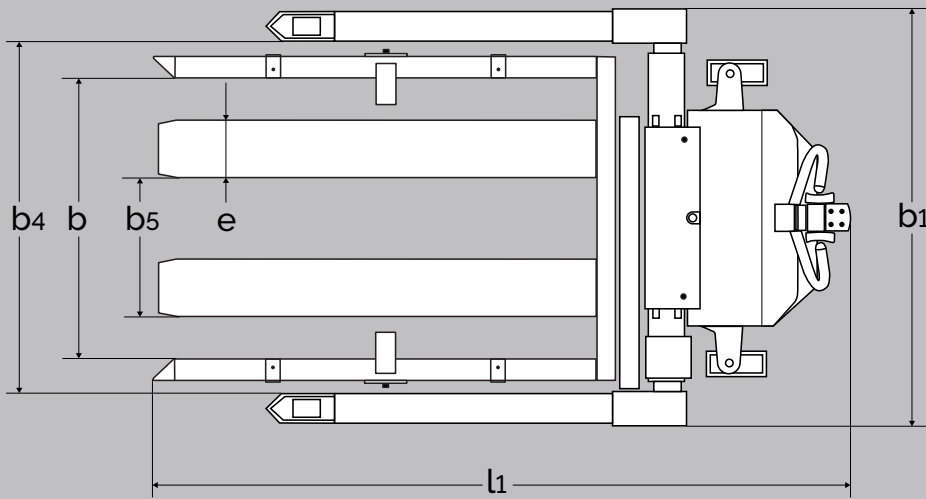
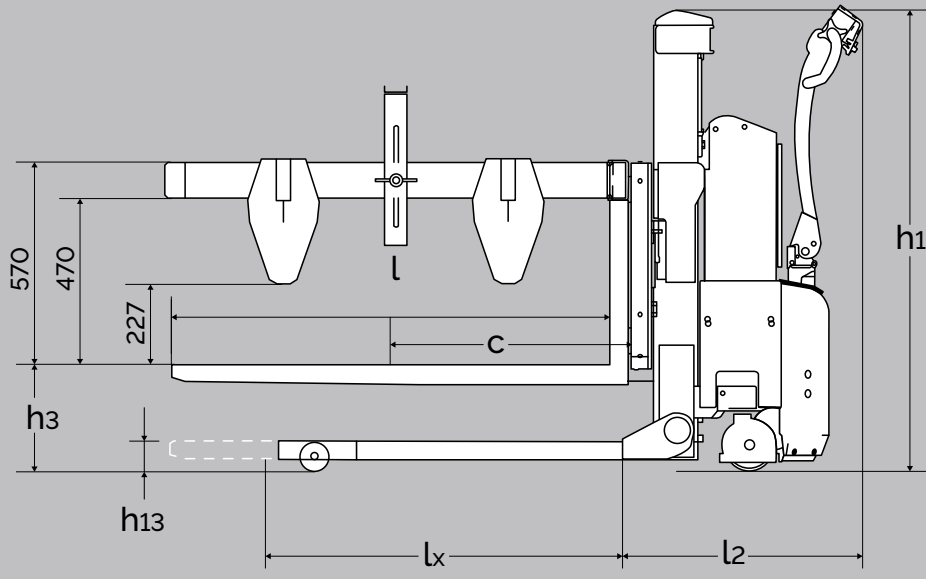


Work in practice

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.





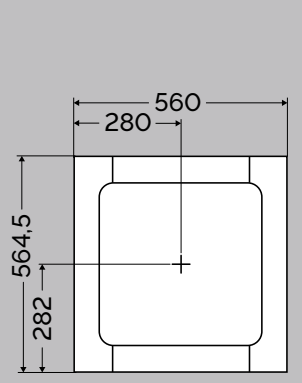
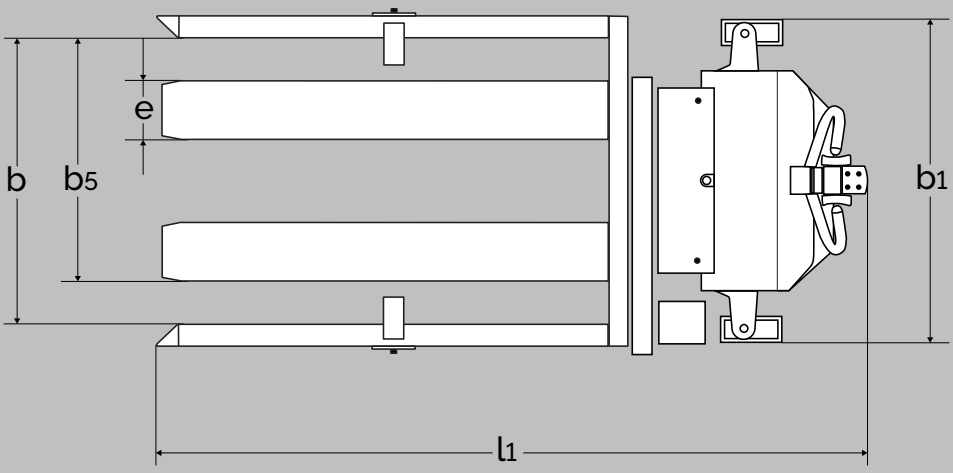
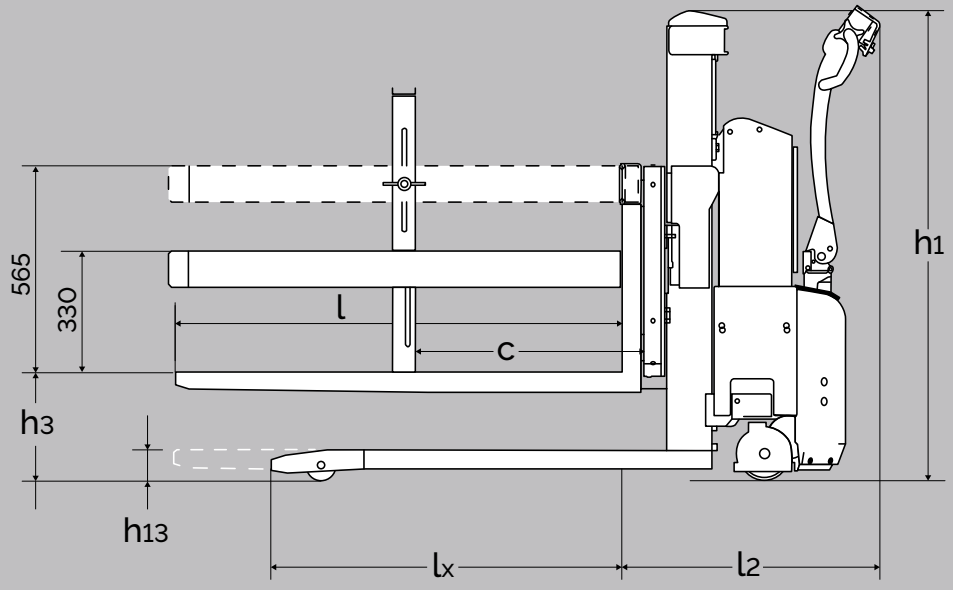
PRODUCT (measured in inch)		ELFRA SELFRA	ELFRA SELFRA	ELFRA SELFRA	ELFRA SELFRA	ELFRA SELFRA
		ELFSRA SELSRA	ELFSRA SELSRA	ELFSRA SELSRA	ELFSRA SELSRA	ELFSRA SELSRA
Capacity in kg		1000*	1000*	1000*	1000*	1000*
Lifting height	h_3	920	1200	1400	1600	1910
Fork length	l	1250				
Overall height	h_1	1330	1530	1730	1930	2240
Overall width	b_1	932, 890 (ELFRA / SELFRA distance between steering wheels 860 mm) / 166 + b_4 (ELFSRA / SELFSRA)				
Width 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	391, 520 / 451, 580	397, 526 / 457, 586	401, 530 / 461, 590	409, 538 / 469, 598
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.

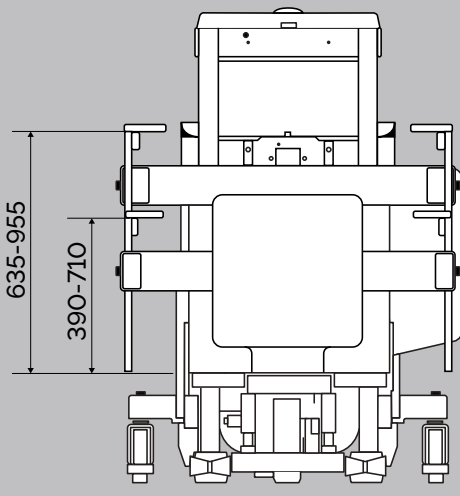
The load capacity that can be tilted is reduced, the larger the distance is between load centre of the load and rotation centre.

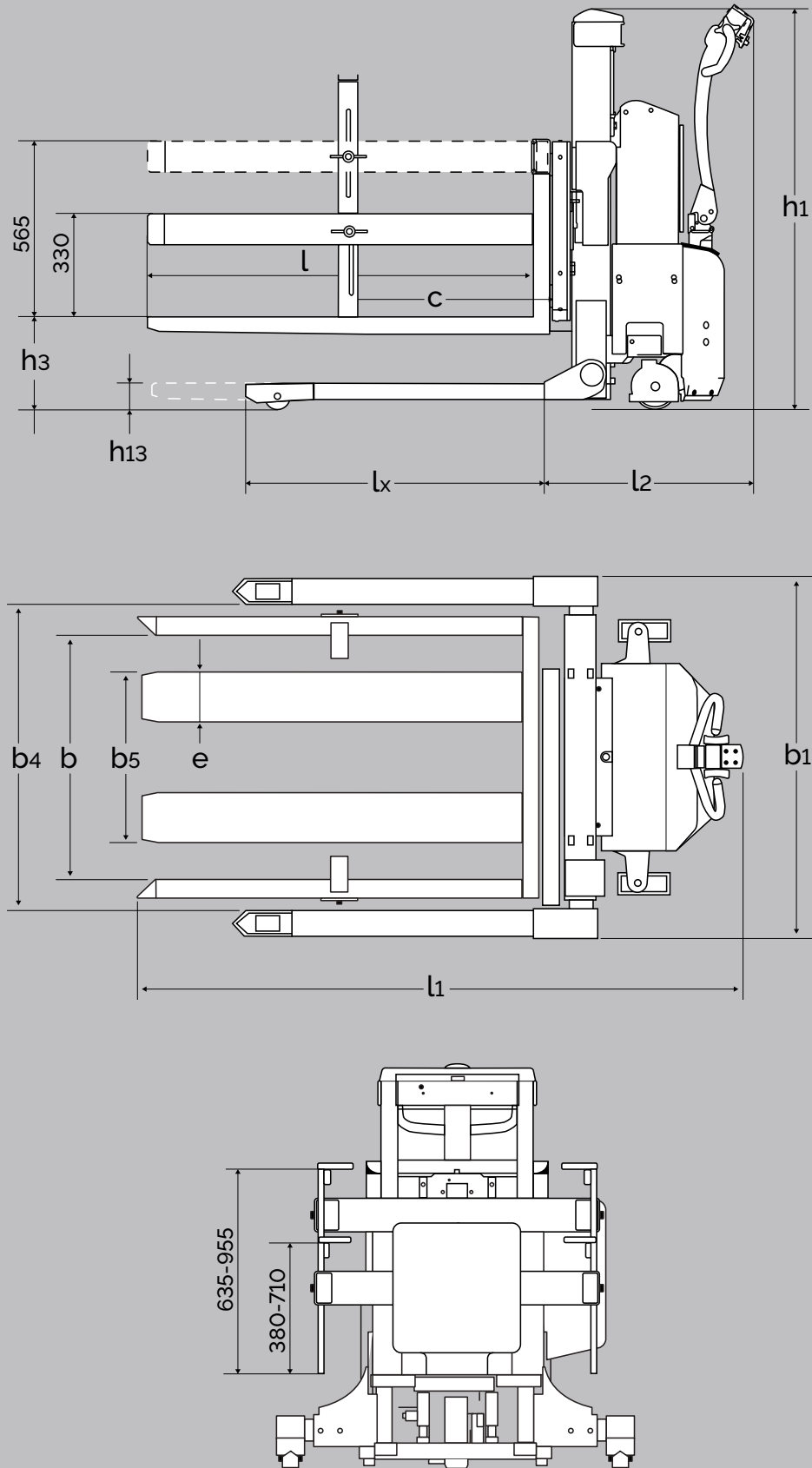
** Width between straddle legs of more than 1306 mm, max. capacity 800 kg.

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



Multi-purpose carriage





PRODUCT (measured in mm)		ELFR SELSR ELFSR SELFSR	ELFR SELSR ELFSR SELFSR	ELFR SELSR ELFSR SELFSR	ELFR SELSR ELFSR SELFSR	ELFR SELSR ELFSR SELFSR
Capacity in kg		1000*	1000*	1000*	1000*	1000*
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)				
Width 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		SELSR / SELFSR 1,2 kW 24 V speed control electronically variable				
Driving speed with/without load		SELSR / 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	391, 520 / 451, 580	397, 526 / 457, 586	401, 530 / 461, 590	409, 538 / 469, 598
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.

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).