

Die Changing Cart RW

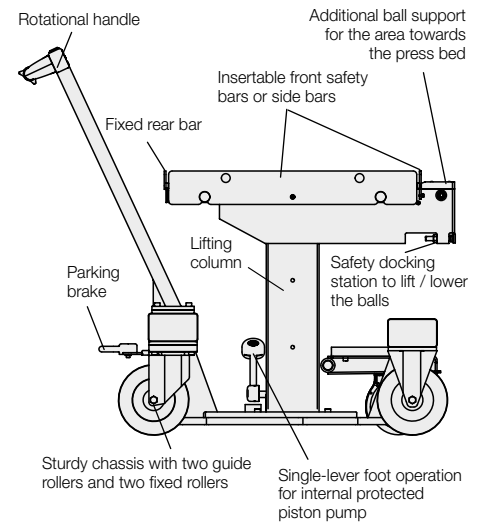
manually movable, with optional auxiliary drive
 with safety docking station, max. load capacity 500 kg



Figure RW with auxiliary drive

Advantages

- Time-saving die change
- Material gentle transport
- Highest safety by automatic docking station and anti-slip protection
- Easy movement by optional battery driven auxiliary drive
- Sturdy and scratch-proof ball table with hard-anodized surface
- Documentation and design in compliance with CE standards
- Exact positioning
- Exact height adjustment by precision lowering
- Improved ergonomics for the user
- Protection against falling down of dies by inserted and secured front bar and side bars
- Safe positioning of the cart by pedal parking brake



Application

Die changing carts RW facilitate the handling of medium-weight dies and enable dies weighing up to 500 kg to be safely transported in an easy and time saving way.

All cart types are especially designed for pressing and punching dies as well as for injection and casting moulds.

Description

Die changing carts RW are manually moved. For easier movement, the front axle can optionally be equipped with a battery driven auxiliary drive.

The die changing table is equipped with ball inserts which facilitate the manual insertion of the dies. During the transport, the ball inserts are lowered and the die is protected against movement. In addition, the die is secured against falling down by safety bars at all sides of the die changing table.

The die changing table can be adjusted in height by a hydraulic lifting column with single-lever foot operation.

For transport, the centre of gravity of the load must be positioned in the centre of the cart and the lifting columns must be completely lowered.

Safety docking station

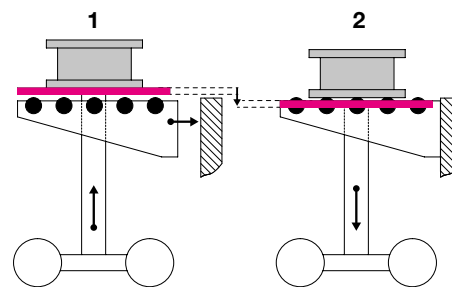
During the transport of the die, the balls are always lowered and the die is protected against movement. Lifting of the ball inserts is made by successful docking to the press bed. The die weight is supported at the press bed.

1. Transport

- Lifting column extended
- Ball inserts lowered
- Die on table plate

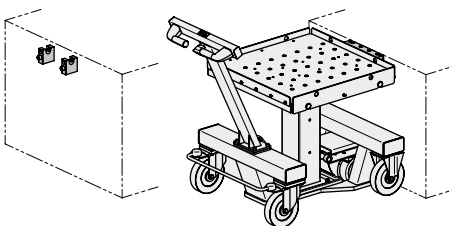
2. Docking

- Lifting column lowered
- Ball inserts lifted
- Die on ball inserts



Version with safety docking station and ball table

Docking situation



Versions

The die changing cart RWA is available in 2 table sizes and 3 stroke ranges. Every version can optionally be equipped with an auxiliary drive.

Option - auxiliary drive

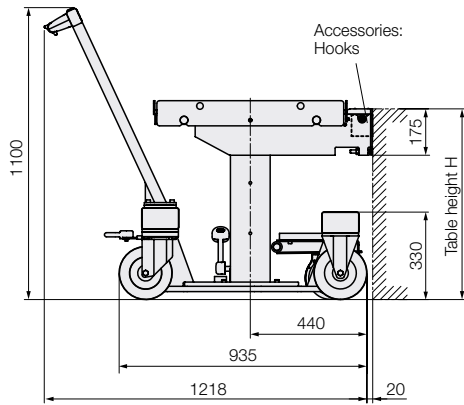
All elements of the auxiliary drive are integrated in the front axle: the electric motor including gear, long-life batteries with high energy density and a power control for optimum control of the motor.

The rotational handle consists of two solid handles, speed and direction of the drive can be controlled by means of a lever at the right handle.

An integrated level compensation ensures an optimum contact pressure of the drive wheel on the hall floor.

A covering protects the drive against shocks and splash water. The high drive torque of the electric motor (17 Nm / 20 da N) facilitates considerably the movement of the changing cart.

Technical data Dimensions



Technical data

Max. load capacity: 500 kg

Table sizes

Version	1	2
Length A x width B [mm]	720 x 720	720 x 450

Lifting range

Version	1	2	3
Total stroke [mm]	200	300	400
Usable stroke [mm]	140	240	340
Min. table height H [mm]	540	620	720
Max. table height H [mm]	680	860	1060

Technical data auxiliary drive

Running performance [km]	2 with full load (5 with average load)
Displacement speed [km/h]	3
Charging time (approx. 90%) [h]	1.5 to 3 (depending on the battery charger)
Battery	24 V DC, Ni-MH, 140 Wh (6 Ah)

Part numbers

Table size [mm]	Total stroke [mm]	Auxiliary drive	Part numbers
720 x 720	200	without	889130100
720 x 720	300	without	889130101
720 x 720	400	without	889130102
720 x 450	200	without	889130103
720 x 450	300	without	889130104
720 x 450	400	without	889130105
720 x 720	200	with	889130106 X
720 x 720	300	with	889130107 X
720 x 720	400	with	889130108 X
720 x 450	200	with	889130109 X
720 x 450	300	with	889130110 X
720 x 450	400	with	889130111 X

Selection battery charger

Standard 1.8 A = **S**

Quick 4.0 A = **Q**

Delivery

One set (2 off) of hooks is included in the delivery of the die changing cart; the hooks can also be ordered as an accessory.

The versions with auxiliary drive are delivered with a battery charger. You can choose between between **type S** or **type Q**. Both battery charges can be ordered as an accessory.

Accessories

Battery chargers

Type S = Standard 1.8 A

100 ... 230 VAC, 50/60 Hz

Charging time 3 h (approx. 90%)

Part no. 789130013

Type Q = Quick battery charger 4,0 A

100 ... 230 VAC, 50/60 Hz

Charging time 1.5 h (approx. 90%)

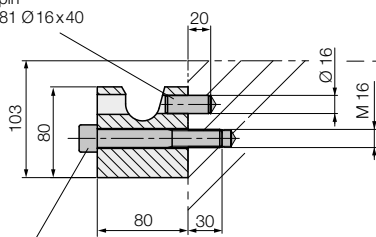
Part no. 789130015

Hooks (1 set = 2 off)

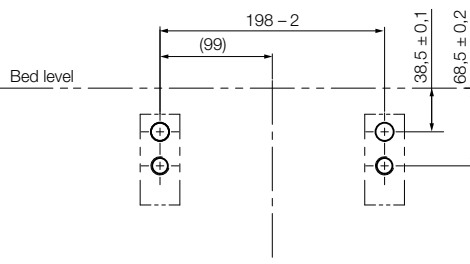
to position and lock the die changing cart

Part no. 789130001

Dowel pin
DIN 1481 Ø16x40



Socket head cap screw
DIN 912-M 16 x 110 - 8.8
Ma = 120 Nm



Dimensions are valid for the infeed height of the die
1.5 mm above the machine table



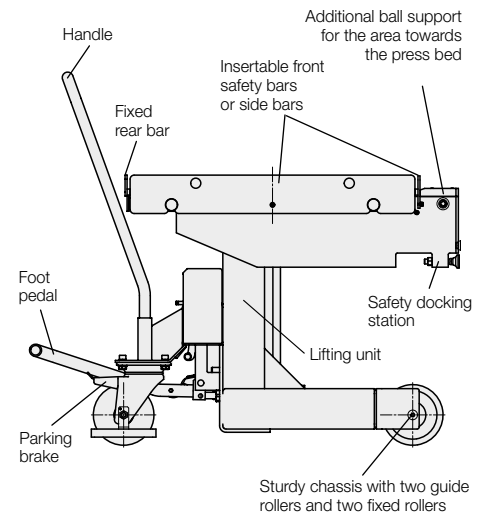
Die Changing Cart RW

manually movable, with safety docking station
 max. load capacity 1,000 kg



Advantages

- Time-saving die change
- Material gentle transport
- Highest safety by automatic docking station and anti-slip protection
- Sturdy and scratch-proof ball table with hard-anodized surface
- Documentation and design in compliance with CE standards
- Exact positioning
- Exact height adjustment by precision lowering
- Improved ergonomics for the user
- Protection against falling down of dies by inserted and secured front bar and side bars
- Safe positioning of the cart by pedal parking brake



Application

Die changing carts RW facilitate the handling of heavy dies and enable dies weighing up to 1000 kg to be safely transported in an easy and time saving way.

All cart types are especially designed for pressing and punching dies as well as for injection and casting moulds.

Description

Die changing carts RW are manually moved. The die changing table is equipped with ball inserts which facilitate the manual insertion of the dies. During the transport, the ball inserts are lowered and the die is protected against movement. In addition, the die is secured against falling down by safety bars at all sides of the die changing table.

The die changing table can be adjusted in height by means of a pedal-operated lifting unit. Precision lowering is effected by a pedal – additional precision lowering for lowering the lifting unit with millimetre accuracy.

For transport, the centre of gravity of the load must be positioned in the centre of the cart and the lifting columns must be completely lowered.

Safety docking station

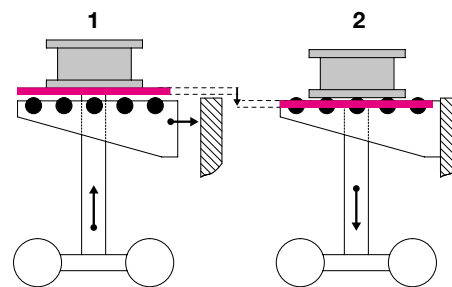
During the transport of the die, the balls are always lowered and the die is protected against movement. Lifting of the ball inserts is made by successful docking to the press bed. The die weight is supported at the press table.

1. Transport

- Lifting unit extended
- Ball inserts lowered
- Die on table plate

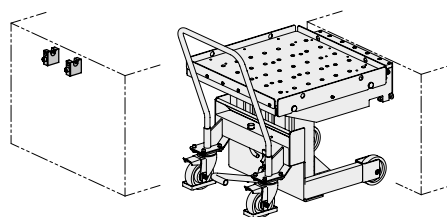
2. Docking

- Lifting unit lowered
- Ball inserts lifted
- Die on ball inserts



Version with safety docking station and ball table

Docking situation



Version

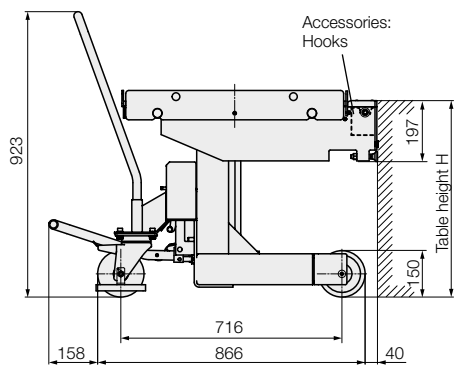
Table size: 720 x 720 mm
 Usable stroke: 635 mm

Precision lowering

for lowering of the lifting unit with millimetre accuracy by pedal.



Technical data Dimensions



Technical data

Max. load capacity: 1000 kg

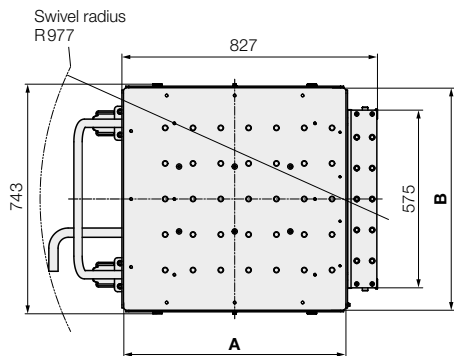
Lifting range

Total stroke	[mm]	700
Usable stroke	[mm]	635
Min. table height H	[mm]	650
Max. table height H	[mm]	1285

Table size* [mm]		Total stroke [mm]	Auxiliary drive**	Part number
A	B			
720	720	700	without	88913 1000

* other table sizes on request

** with auxiliary drive on request



Delivery

One set (2 off) of hooks is included in the delivery of the die changing cart; the hooks can also be ordered as an accessory.

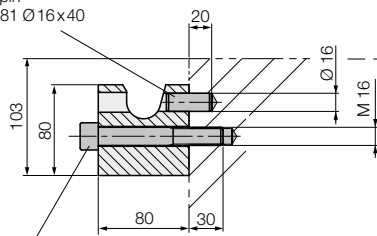
Accessories

Hooks (1 set = 2 off)

to position and lock the die changing cart

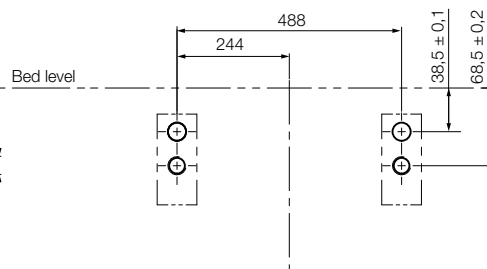
Part no. 789130001

Dowel pin
DIN 1481 Ø16x40



Socket head cap screw
DIN 912-M 16 x 110 - 8.8
Ma = 120 Nm

All dimensions in [mm]



Dimensions are valid for the infeed height
of the die 1.5 mm above the machine table

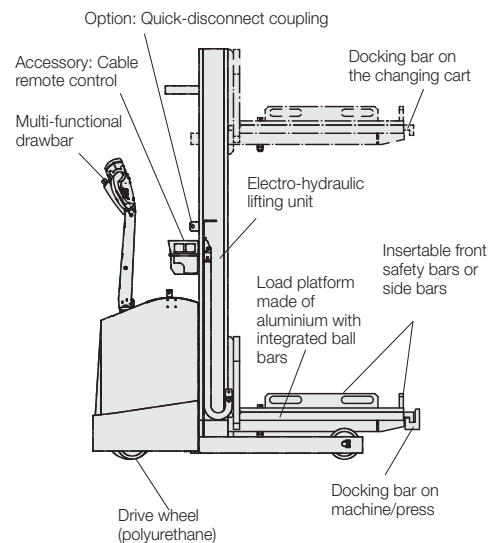


Die Changing Carts RWA with Electric Drive with electro-hydraulic lifting platform, die changing table and hydraulic ball bars, max. load capacity 1600 kg



Advantages

- Safe and gentle die transport of heavy dies
- Time-saving die change
- Integrated die changing table with hydraulic ball bars
- High safety by docking bars and lowerable ball bars
- Protection against falling down of dies by inserted and secured side bars
- Simple and central operation with multi-functional drawbar
- Multi-function display on the drawbar
- Robust vehicle technology
- Modular design with standard drive



Application

The die changing cart RWA is used for the transport and the change of pressing and punching dies as well as injection and casting moulds up to a weight of 1600 kg.

Description

The die changing cart RWA is an electrically driven walking and lifting cart, especially equipped for the transport and the change of dies.

The electro-hydraulic lifting platform is designed as die changing table with integrated hydraulic ball bars, which facilitate the manual insertion of the dies onto the press table.

During the transport, the balls are always lowered and the die is protected against movement.

A safety circuit ensures that the die changing cart can only be displaced with lowered ball bars.

In addition, the die is secured on the lifting platform by insertable front safety bars or side bars.

For the transfer of the die to the press, the lifting platform is equipped with a protrusion.

Versions

The die changing cart RWA is available with 4, 6 or 8 ball bars and with different table sizes.

Power supply

The power supply of the electric drive, the lifting platform and the ball bars is made via an installed battery 24 V DC with 240 Ah.

This battery can be completely charged with the battery charger included in the delivery within 12 hours.

Automatic slow driving at low battery status as well as automatic lift cutout in the case of further discharge.

The maximum running performance is approximately 3 hours at full load.

Option

Die changing cart with quick-disconnect coupling for external ball or roller bars

The die changing cart RWA can optionally be equipped with an additional hydraulic control circuit with quick-disconnect coupling for the operation of the hydraulic ball and roller bars in the press table.

The operating pressure is 80 bar.



Quick-disconnect coupling

Operation

The operation of the die changing cart RWA is completely made at the multi-functional drawbar.

- Rotary switch for continuous and sensitive driving (speed control)
- Toggle switch for reduced speed 2.0 km/h
- Push-button for driving with reduced speed and vertical drawbar position
- Steering (by drawbar)
- Slide switch for sensitive lifting and lowering of the lifting platform
- Push-button for lifting/lowering of the balls (as an option)
- Signal horn and key switch
- Main current safety switch (EMERGENCY STOP)

Multi-functional display

- for display of
- battery status and operating hours
- maintenance intervals and error messages

Versions as per customer's request

- Roller bars instead of ball bars
- Ball or roller distance
- Dimensions of the lifting platform
- Radio remote control

Please contact us.

Accessories

see page 3

Technical data Dimensions

Technical data

Max. die weight	[kg]	1600
Platform size	[mm]	1150 x 800*
Lifting range	[mm]	250 – 1650
Stroke of the ball bars	[mm]	2
Max. lifting force / bar	[kN]	8.8
Load capacity at the load centre of gravity 400/ 600 mm	[kg]	1600 / 600
Ball spacing	[mm]	76
Max. driving speed	[km/h]	5
Running performance		approx. 3 h at full load
Empty weight	[kg]	1200

* Individual platform sizes and ball distances on request

Scope of supply:

- Changing cart with built-in battery
 - Battery charger
 - Lifting platform
 - 4, 6 or 8 installed ball bars
 - Insertable side and front bars
 - Battery filling system Aquamatic
- Filling station with electric pump for fast filling of the batteries with water.

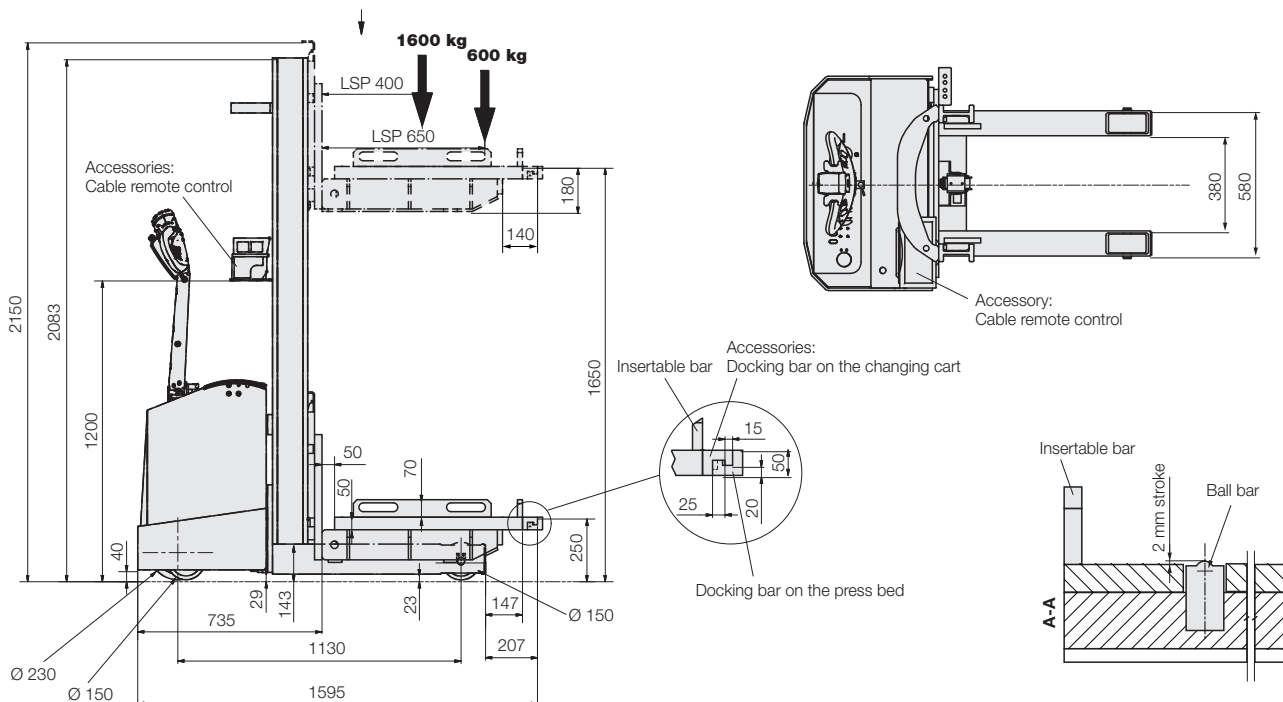
Further accessories and options in addition to the standard scope of delivery see page 3.

Type	RWA 1600/4	RWA 1600/6	RWA 1600/8
Number of ball bars (each 744 mm long)	4	6	8
Part no.	88913 1600	88913 1610	88913 1620

Die changing cart with quick-disconnect coupling

Part no.	88913 1601	88913 1611	88913 1621
----------	------------	------------	------------

Dimensions

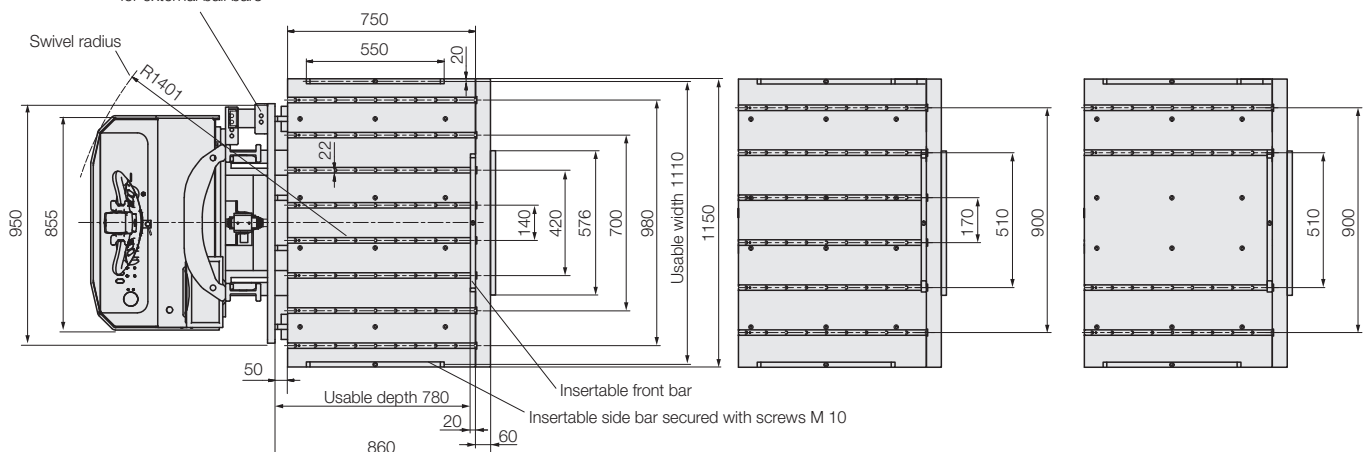


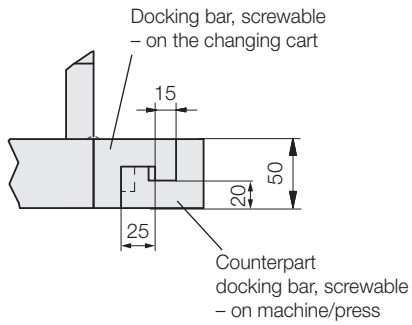
Option: Quick-disconnect coupling
for external ball bars

RWA 1600
with 8 hydraulic ball bars

Plate thickness
with 6 hydraulic ball bars

Plate thickness
with 4 hydraulic ball bars





Docking bars

To obtain the exact insertion height at the press table, the lifting platform and the press table can be provided with docking bars.

Docking bars

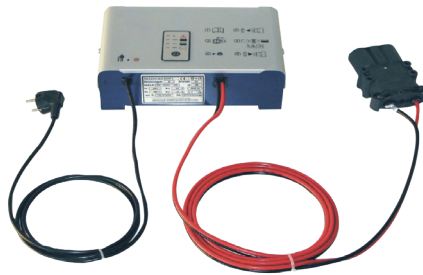
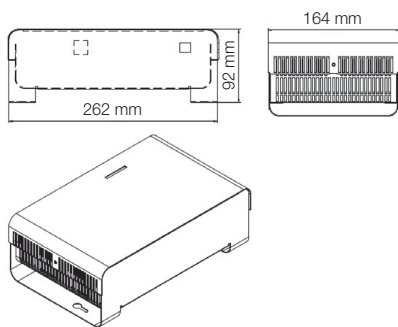
for fixing at the changing cart, L = 1150 mm

Part no. 889130022

Docking bars

for fixing at the machine, L = 576 mm

Part no. 889130023



Extra battery charger E 230 G*

Charging time: 12 h

Code class: IP 21

Part no. 889130025

* USA version on request



Cable remote control

with the functions:

- lifting/lowering
- driving: forwards/backwards
- emergency stop

(Mounting position see drawing on page 2)

Part no. 889130026