

For more ergonomic workplaces.

ErgoMove 1000 and ErgoMove 2000. The Electric Drive Systems from Blickle.



INNOVATION AWARD FOR
ERGONOMICS 2021

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Safety instructions

Please note that the positions of the swivel and fixed castors have a significant impact on the manoeuvrability of the unit. An apron must be attached to the user side of a trolley in order to prevent potential foot injuries. As an alternative, we also offer swivel castors with integrated foot guards. We also recommend fitting one end of the unit with spring-loaded swivel castors on arrangements in which the drive castors are attached in the centre.

The customer is entirely responsible for the transport unit and its operation. The drive system is suited for trolleys with a total load up to max. 2,000 kg (ErgoMove 2000) with two swivel castors and two fixed castors with drive as well as for operation on a level indoor surface. If the application conditions differ, the permissible total weight of the unit must be established. We recommend using the electric drive system in an ambient temperature of between +5°C and +40°C. Please comply with the standards and regulations applicable to your application.

We work for you. And with you. Blickle – A company in motion.



As a family company, we place value on continuity – alongside Reinhold and Denise Blickle, the third generation of the family is now active in the company with Dr. Sarah Blickle-Fenner and David Blickle.

We have been one of the three leading manufacturers of wheels and castors in the world for decades because of our reliability, innovation and close customer relationships.

The name Blickle stands for uncompromising quality, high availability, delivery performance and global presence. Our motivated employees develop optimal products for diverse applications. Their tools: good ideas, creativity and inventiveness, years of experience and high competence in materials and manufacturing. Customer satisfaction is our highest priority. A continuous dialogue with users is the basis not only for our unique standard range of wheels and castors but also

for countless individual solutions.

This experience, paired with our own “Made in Germany” manufacturing facilities, guarantees you one thing for certain: “we innovate mobility”.

- More than 1,000 employees worldwide, over 750 of whom are based at the headquarters in Rosenfeld, Germany.
- 18 Blickle sales subsidiaries in Europe, North America, Asia and Australia
- Sales partners and representatives in over 120 countries of the world.
- Certifications according to DIN EN ISO 9001, DIN EN ISO 14001 and DIN EN ISO 50001.



Our headquarters are in Rosenfeld, Germany. This demonstrates our commitment to quality and manufacturing products “Made in Germany”.

The advantages of electric drive systems. Simple. Easy. More efficient.

Muscular and skeletal problems are the most common reasons for people being unable to work, particularly if they have a job that frequently involves physically strenuous activity like pushing and pulling loads. The electric drive systems of the Blicke ErgoMove series reduce these health risks considerably. The physical strain on the operator is decreased during internal material transport due to the considerably lower amount of effort required compared with manual operation. In the following areas, the electric drive systems offer major advantages:

Logistical process optimisation

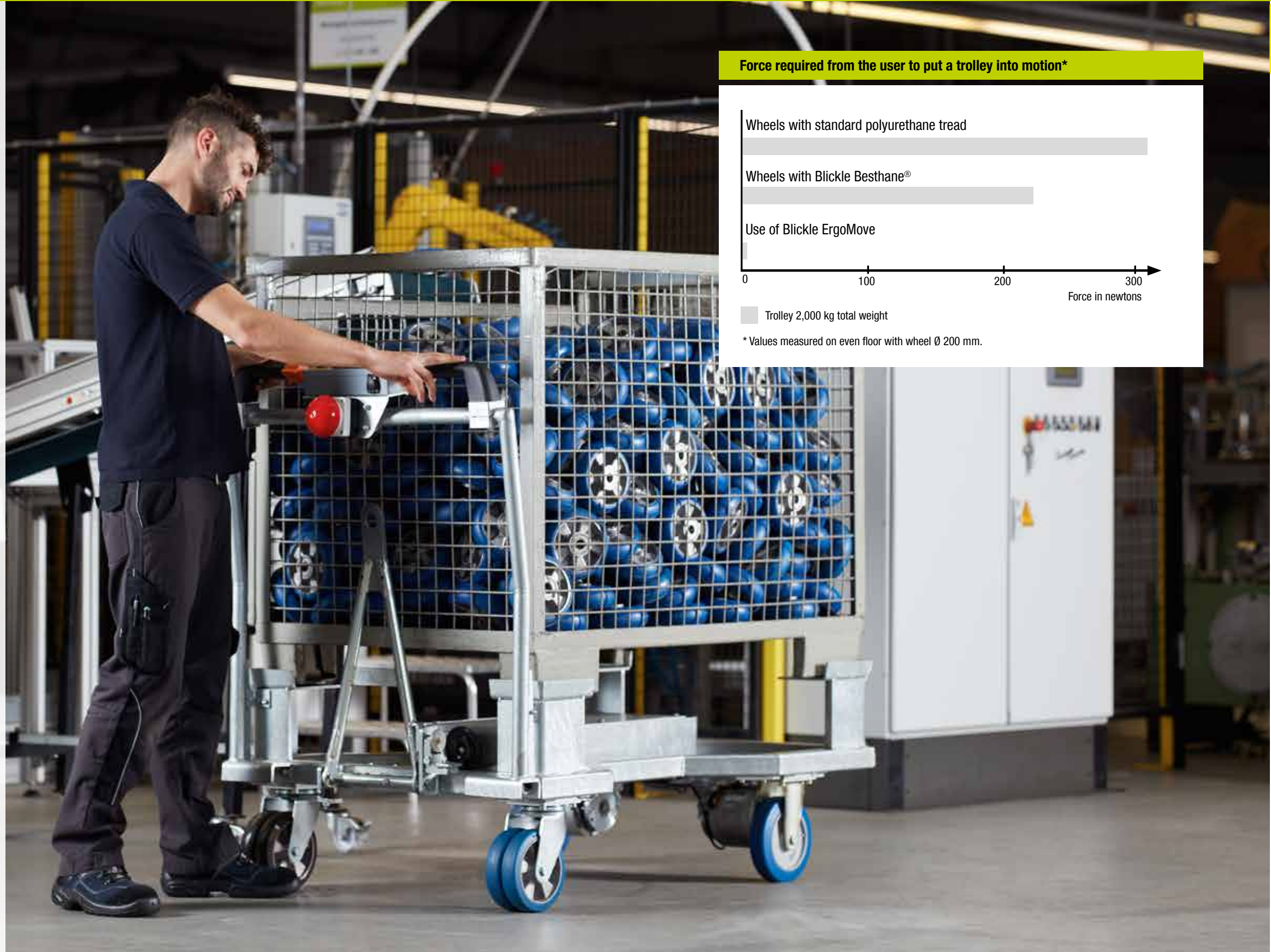
- Easy transport of heavy loads
- Reduced travel distances
- Automation meets flexibility

Improved ergonomics

- Ergonomically flawless working conditions
- Reduced strain during physically demanding work
- Transport of tall loads by ergonomic means

Efficiency

- Increased efficiency
- Reduction of sick days
- Decrease in the number of trolleys



Overview of the systems.

The drive system ErgoMove 1000.

The ErgoMove 1000 moves loads up to 1,000 kilogrammes and consists of the two set components **cockpit and electrically-driven fixed castors**. It impresses with its simple “plug and play” installation and intuitive usability. As a result, the system can be used immediately after only brief instruction, ensuring high efficiency and cost savings.



Power assistance up to 1,000 kg



Manual operation possible



Simple installation (plug and play)

The drive system ErgoMove 2000.

The ErgoMove 2000 can transport loads up to 2,000 kilogrammes. It consists of the following set components: **Cockpit, handles** (with one or two rotary joysticks), **electrically driven fixed castors and control box**. This system offers a unique level of customisability. Special solutions can therefore be realised according to the customer's needs.

The version ErgoMove 2000T is suitable for towing operation and enables the recovery of energy (recuperation). The batteries charge automatically via the control during towing operation.



Power assistance up to 2,000 kg

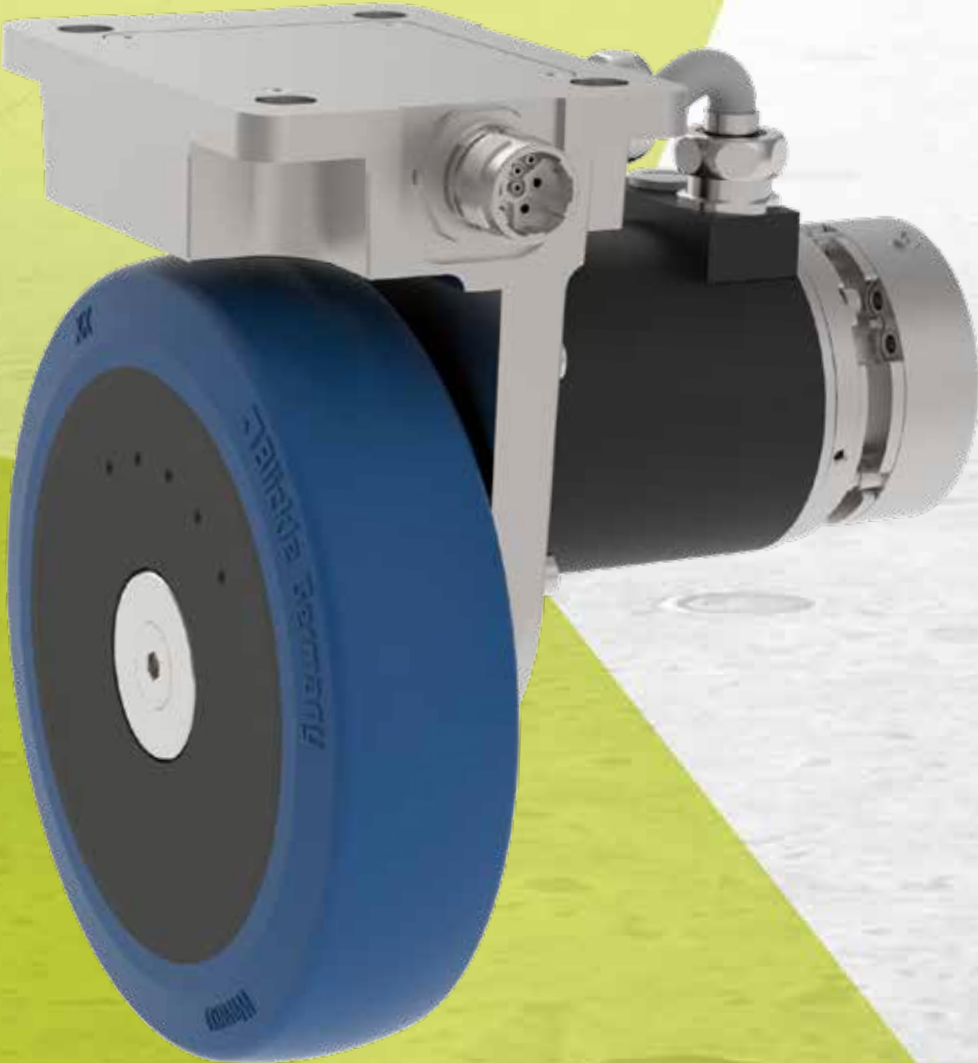


Towable in 2000T version



Recuperation: Battery is charged during towing operation

The electric drive system ErgoMove 1000



The electric drive system ErgoMove 1000. Set components and options.

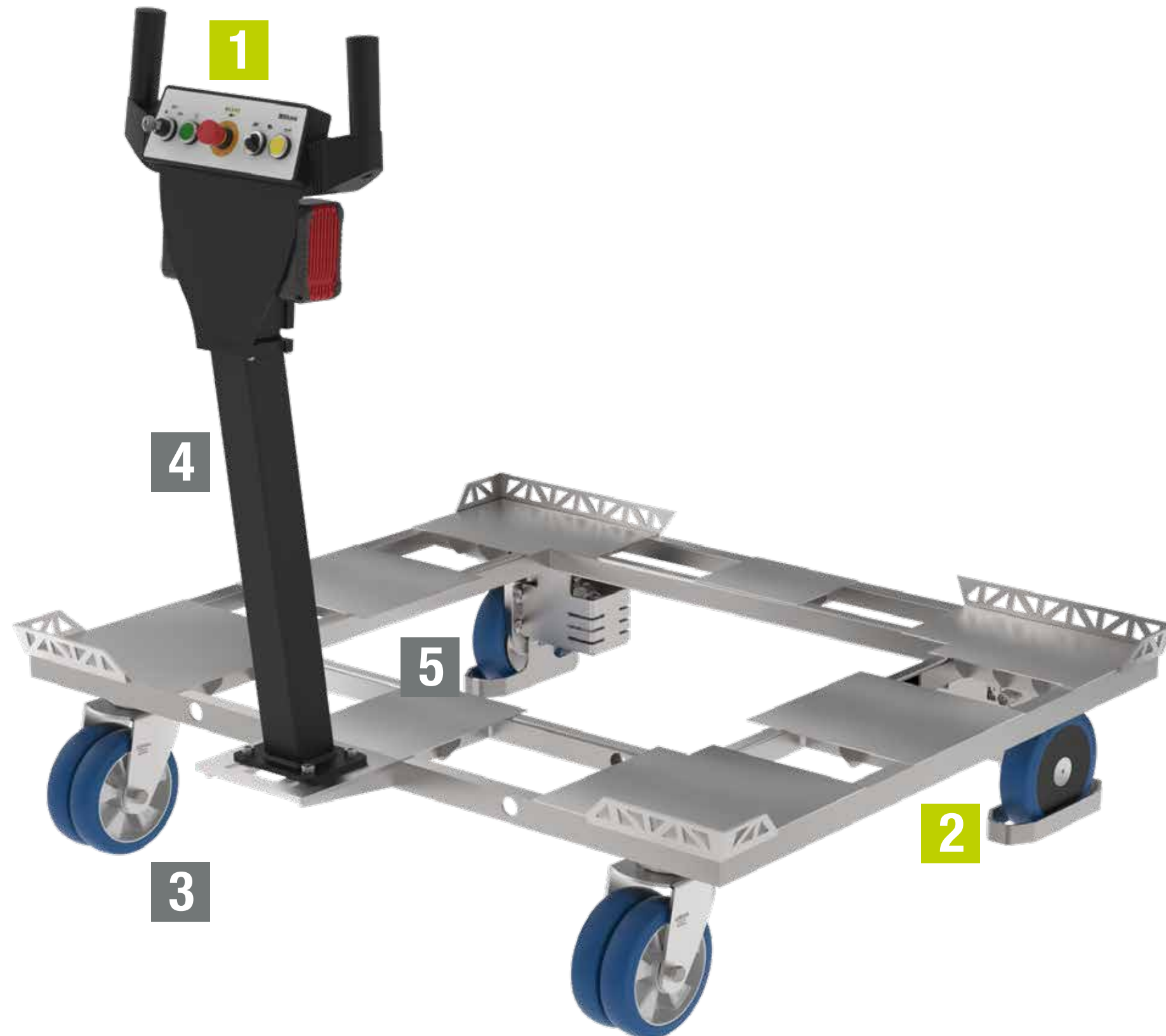
The ErgoMove 1000 is a manually operated system for transporting loads of up to 1000 kg. In addition to the drive assistance, the ErgoMove 1000 also features steering and braking assistance. As part of the support structure, the driven fixed castors of the ErgoMove 1000 support the weight of the trolley. In combination with the intelligent control system, this ensures smooth movement no matter the trolley weight.

Plug and Play:

The 3 m long cables come attached to the cockpit. All that needs to be done before using the ErgoMove 1000 is to connect them to the fixed castors, making the assembly process cheaper and quicker. This makes retrofitting existing trolleys with the ErgoMove system a quick and easy process.

Safety:

The electric drive system already possesses all relevant safety features, such as emergency stop, anti-trap protection and electrical-mechanical dead man's brake. This increases the personal protection and ensures safe goods transport without generating additional costs for upgrading the safety aspects of the system. Furthermore, the ErgoMove 1000 corresponds to the Machinery Directive 2006/42/EC with an installation declaration and installation instructions.



Modular set components

- 1 Cockpit**
The standard ErgoMove 1000 set includes the ergonomic handle and two preassembled cables. Two different versions of the handle are available: one with a power sensor, and one with two rotary joysticks. The cockpit has an integrated control system and replaceable batteries. More information can be found on pages 14 and 15.



- 2 Electrically-driven fixed castors**
The set contains one left and one right fixed castor with a thrust force of max. 30 daN each. These are available in different sizes (see page 16).



Optional features

- 3 Suitable swivel castors**
A large selection of suitable swivel castors can be found on page 17. Antistatic versions (-AS) are also available.
- 4 Console extension**
For additional information about a console extension, please refer to page 16.
- 5 Foot guard and/or motor cover**
For additional information about these and other accessories, please refer to page 16.



ErgoMove 1000.

The cockpit and its functions.

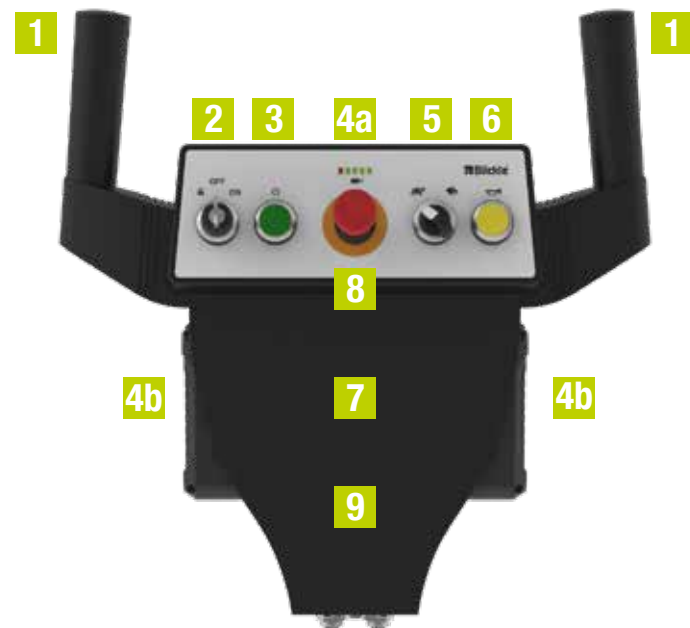
✓ Protection class IP 40

The ergonomic handle with integrated power sensor was designed in collaboration with the Institute for Materials Handling Technology and Logistics in Stuttgart and the Heilbronn College to meet demanding ergonomic requirements. It uses a sensor system to measure the operating forces

on the ergonomic handle. The motors on the drive castors are controlled based on the amount of force applied to the handle and the direction. Two different versions of the ergonomic handle are available for the ErgoMove 1000. The first version uses a power sensor system. The second

uses two rotary joysticks. In case of the second version, the motors are controlled simultaneously with single hand usage and separately with two hand usage. The motors are controlled separately in this version. The two hand usage guarantees maximum manoeuvrability even in tight spaces.

Version 1: The ergonomic handle with power sensor

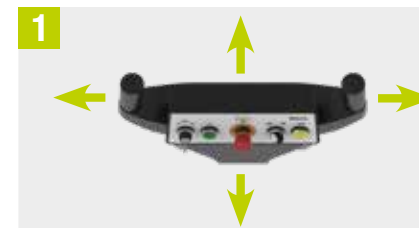


- 1) Handle with hand detection
- 2) Key switch
- 3) On button
- 4) Battery level display
- 4b) Replaceable batteries
- 5) Mode "Turtle" / "Hare"
- 6) Horn button
- 7) Anti-trap protection
- 8) Emergency stop button
- 9) Integrated power sensor

Version 2: The ergonomic handle with two rotary joysticks

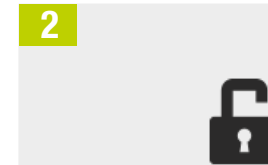


- 1) Handle with hand detection and rotary joysticks
- 2) Key switch
- 3) On button
- 4) Battery level display
- 4b) Replaceable batteries
- 5) Mode "Turtle" / "Hare"
- 6) Horn button
- 7) Anti-trap protection
- 8) Emergency stop button



Intuitive control

The ergonomic handle with integrated power sensor detects the force applied by the operator in two dimensions: front / back, left / right. This force is converted into control signals to support the steering. This in turn provides simple and intuitive handling. The cockpit with two rotary joysticks controls the driven castors with the joysticks.



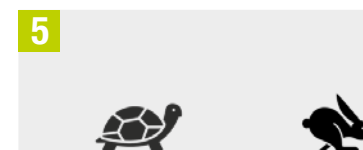
Emergency release

If necessary, the key switch (🔑) can be used to release the dead man's brakes. This makes it possible to move the trolley without a power supply.



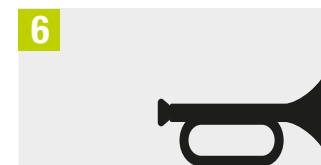
Replaceable batteries and battery level display

The battery unit uses standard replaceable batteries, which can be quickly replaced with a simple plug mechanism. In this way the permanent operation is guaranteed through replacement batteries. Full batteries can get 1000 kg loads moving up to 300 times on an even surface.



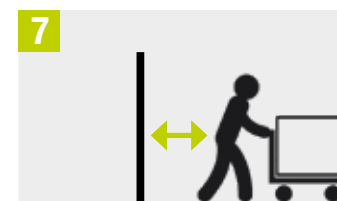
Modes "Turtle" / "Hare"

Turtle mode forwards 2 km/h, reverse 2 km/h.
Hare mode forwards 4 km/h, reverse 2 km/h.



Horn

Both the power sensor and joystick versions come with a horn. This is integrated into the cockpit. It makes an important contribution to the safety of goods transports and is therefore required for a valid CE declaration.




Anti-trap protection


The anti-trap protection on the ergonomic handle with rotary joysticks is implemented with a pressure-sensitive mushroom button. If the button is pressed against the operator, the trolley will go back a little in the opposite direction. In case of the ergonomic handle with power sensor, the power sensor has the function of an anti-trap protection. The handle is capable of detecting very small levels of force (max. 28 N required at 1,000 kg).

The ErgoMove 1000 set.
Order overview and scope of delivery.

The ErgoMove 1000 is a modular system. The possible combinations with the two cockpit versions are listed in the following table. Additional options and spare parts are also available.

				
Description illustration*	Drive castor with wheel Ø 160 mm and total height 202 mm	Drive castor with wheel Ø 190 mm and total height 235 mm	Ergonomic handle with integrated control and operation via power sensor (-EG)	Ergonomic handle with integrated control and operation via 2 rotary joysticks (-2FG)
Set 1: SET EM1000-POBS 160K-ET-EG	X	-	X	-
Set 2: SET EM1000-POBS 160K-ET-2FG	X	-	-	X
Set 3: SET EM1000-POBS 190K-ET-EG	-	X	X	-
Set 4: SET EM1000-POBS 190K-ET-2FG	-	X	-	X

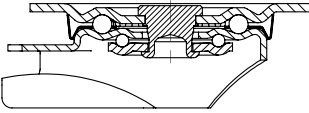
* The system also includes two 3 m long cables for connecting the cockpit to the drive castors and two replaceable batteries. The cables come preassembled on the ergonomic handle. A connector with a bayonet lock is used to connect the cables to the drive castors. The charger is available as an option.

						
	Foot guard***	Motor cover***	Charger	Spare battery***	Base plates****	Console extension
Article no.	For wheel Ø 160mm: EM1000-FOOT-GUARD-160 For wheel Ø 190 mm: EM1000-FOOT-GUARD-190	EM1000-MOTOR-PROTECTION	EM-CHARGER-18V2x3A	EM-BATTERY-18V5.2AH	EM1000-BASEPLATE EM1000-BASEPLATE-L	EM1000-CONSOLE
Description	Foot guard for preventing foot injuries.	Motor cover for protection against impacts and other mechanical damages.	Charger for two replaceable batteries, charging voltage 18V; charging current 2 x 3 A.	Replaceable battery in original manufacturer quality, 18V; 5.2 Ah.	For connecting the ergonomic handle with power sensor or the console extension (steel, with cable hole).	Four-sided adapter pipe for extending the handrail under the ergonomic handle with power sensor. Total height adjustment of 577 mm.

** The extension cable **EM1000-CABLE-2M** (2 m) incl. plug for connection between the cockpit and drive castors is optional (***).
*** Two pieces are required for a complete set. Foot guard and motor cover can also be combined.
******EM1000-BASEPLATE** (140 x 110 x 8 mm, untreated steel): mounted in a lying position to the frame. **EM1000-BASEPLATE-L** (160 x 160 x 8 mm; zinc-plated, blue-passivated): mounted in a overhanging position to the frame. For additional information about the accessories, please refer to the relevant product data sheet.

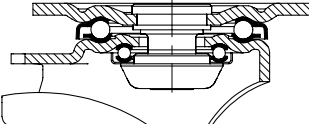
Set add-on.
Suitable swivel castors.

The Blickle standard range contains more than 30,000 products. This includes a number of swivel castors that can be combined with the ErgoMove 1000.



Housing: Series L


- Pressed steel, zinc-plated, blue-passivated, Cr6-free
- Double ball bearing in swivel head
- Stable central kingpin
- Swivel head seal
- Minimum swivel head play and smooth rolling characteristic, increased service life thanks to the special dynamic Blickle riveting process



Housing: LH/LHD series

- Strong pressed steel, zinc-plated, blue-passivated, Cr6-free
- Heavy fork and top plate fitting
- Double ball bearing in the swivel head, very stable central kingpin, bolted and secured
- Particularly resistant to shocks and impact thanks to **specially shaped, hardened bearing seats**


ALBS



Wheels: ALBS series





- Tread: High-quality polyurethane-elastomer Blickle Bestthane® Soft, hardness 75 Shore A, blue, non-marking, non-staining
- Wheel centre: Die-cast aluminium

ALST-AS



Wheels: ALST-...-AS series

- Tread: High-quality polyurethane-elastomer Blickle Softthane®, hardness 75 Shore A, grey, non-marking, non-staining, **antistatic**
- Wheel centre: Die-cast aluminium

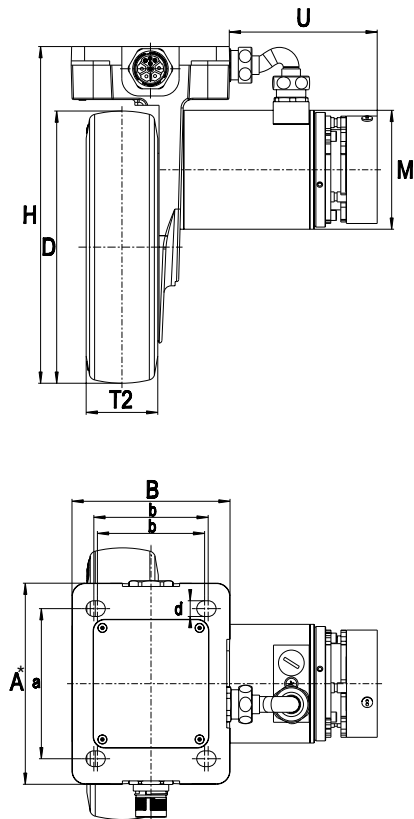
Accessories Suitable swivel castors (see below for images)	Wheel Ø [mm]	Wheel width [mm]	Load capacity at 4 km/h [kg]	Total height [mm]	Plate size [mm]	Bolt hole spacing [mm]	Bolt hole Ø [mm]
LH-ALBS 160K	160	50	550	202	140 x 110	105 x 75-80	11
LH-ALST 160K-AS 	160	50	550	202	140 x 110	105 x 75-80	11
L-ALBS 200K	200	50	400	235	140 x 110	105 x 75-80	11
L-ALST 200K-AS 	200	50	400	235	140 x 110	105 x 75-80	11
LH-ALBS 200K*	200	50	700	245	140 x 110	105 x 75-80	11
LH-ALST 200K-AS* 	200	50	700	245	140 x 110	105 x 75-80	11
LHD-ALBS 181K	180	2 x 44	800	235	140 x 110	105 x 75-80	11
LHD-ALST 181K-AS 	180	2 x 44	800	235	140 x 110	105 x 75-80	11

							
Accessories	Article no.	Illustration for LH-ALBS series*	Illustration for LH-ALST-...-AS series* 	Illustration for LHD-ALBS 181K series	Illustration for LHD-ALST 181K-AS series 	Illustration for L-ALBS 200K	Illustration for L-ALST 200K-AS 
	Description	Pressed steel swivel castor	Pressed steel swivel castor, antistatic	For perfect swivel	For perfect swivel, anti-static	Pressed steel swivel castor	Pressed steel swivel castor, antistatic
							Item suffix -FS, on request

* When using the LH-ALBS 200K and LH-ALST 200K-AS, the steel adapter plate APS3-10 is required for the set **SET EM1000-POBS 190K...**

Technical details.
The drive castors.

✓ Protection class IP 40



Heavy duty fixed castor with electric drive and integrated dead man's brake. Wheel with Blickle Besthane® Soft polyurethane tread, with synthetic wheel centre.

Housing:

- Made from robust cast-iron, zinc-plated, blue-passivated, Cr6-free, with integrated motor controller

Tread:

- High-quality polyurethane-elastomer Blickle Besthane® Soft, hardness 75 Shore A
- Outstanding operational comfort thanks to particularly thick, elastic tread
- Excellent floor preservation, low-noise operation
- Very low rolling resistance
- High dynamic load capacity
- High abrasion resistance
- High cut and tear propagation resistance
- Colour blue, non-marking, non-staining
- Very good chemical bond with the wheel centre

Wheel centre:

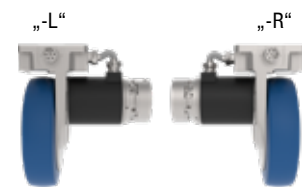
- High quality synthetic material, impact-resistant, black

Drive:

- Brushless DC motor with integrated electro-mechanical brake system (dead man's function, 30 Nm static holding torque)
- Thrust force max. 30 daN per motor used



The electrically driven fixed castors are already included in the set but are also available as individual components.



Fixed castor with electric drive system	Wheel Ø (D) [mm]	Wheel width (T2) [mm]	Load capacity at 4 km/h [kg]	Total height (H) [mm]	Plate size (A* x B) [mm]	Bolt hole spacing (a x b) [mm]	Bolt hole Ø (d) [mm]	Motor Ø (M) [mm]	Motor protrusion (U) [mm]
EM1000-POBS 160K-ET-L	160	50	400	202	140 x 110	105 x 75-80	11	85	105
EM1000-POBS 160K-ET-R	160	50	400	202	140 x 110	105 x 75-80	11	85	105
EM1000-POBS 190K-ET-L	190	50	480	235	140 x 110	105 x 75-80	11	85	105
EM1000-POBS 190K-ET-R	190	50	480	235	140 x 110	105 x 75-80	11	85	105

"-L" for left castor and "-R" for right castor.

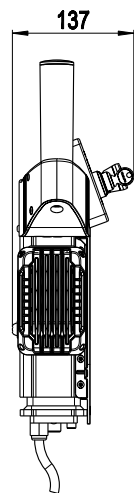
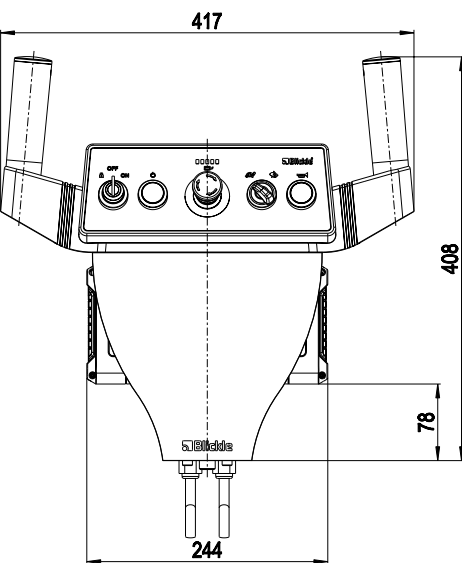
* When the connector is attached, the protrusion over the top plate is 78 mm.

Technical details.
The different versions of the cockpit.

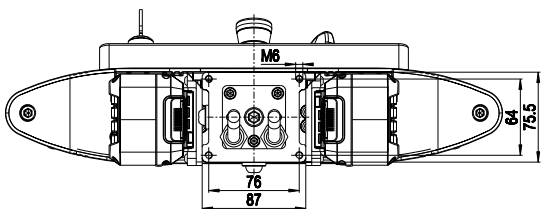
✓ Protection class IP 40

Version 1: The ergonomic handle with power sensor

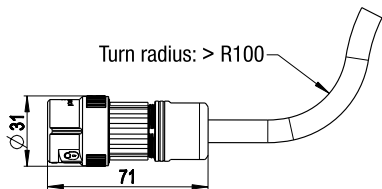
Dimensions ergonomic handle with power sensor



Dimensions top plate fitting
(View from below)

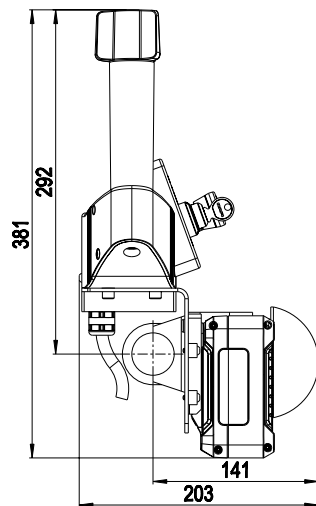
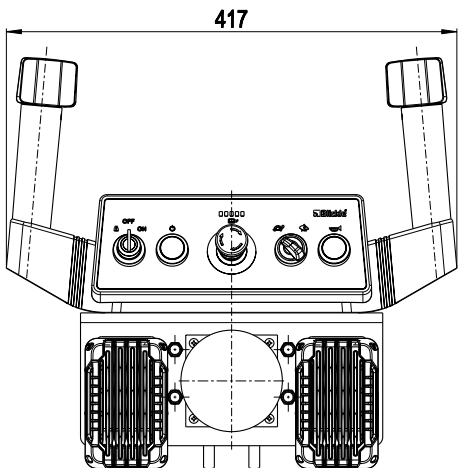


Dimensions connector

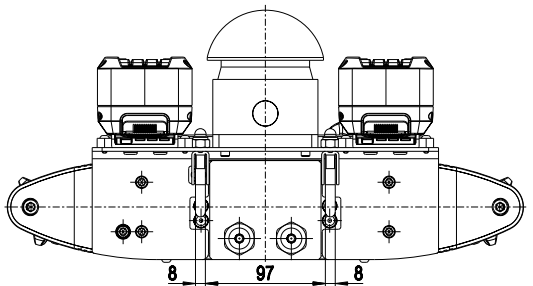


Version 2: The ergonomic handle with two rotary joysticks

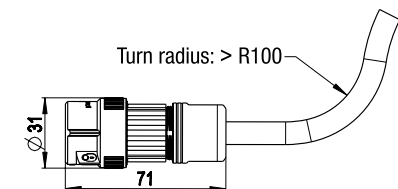
Dimensions ergonomic handle with two rotary joysticks. Bracket clips for pipe diameter 33-36 mm are used for assembly.



Dimensions bracket clips
(View from below)



Dimensions connector



The electric drive system ErgoMove 2000



The electric drive system ErgoMove 2000. Set components and options.

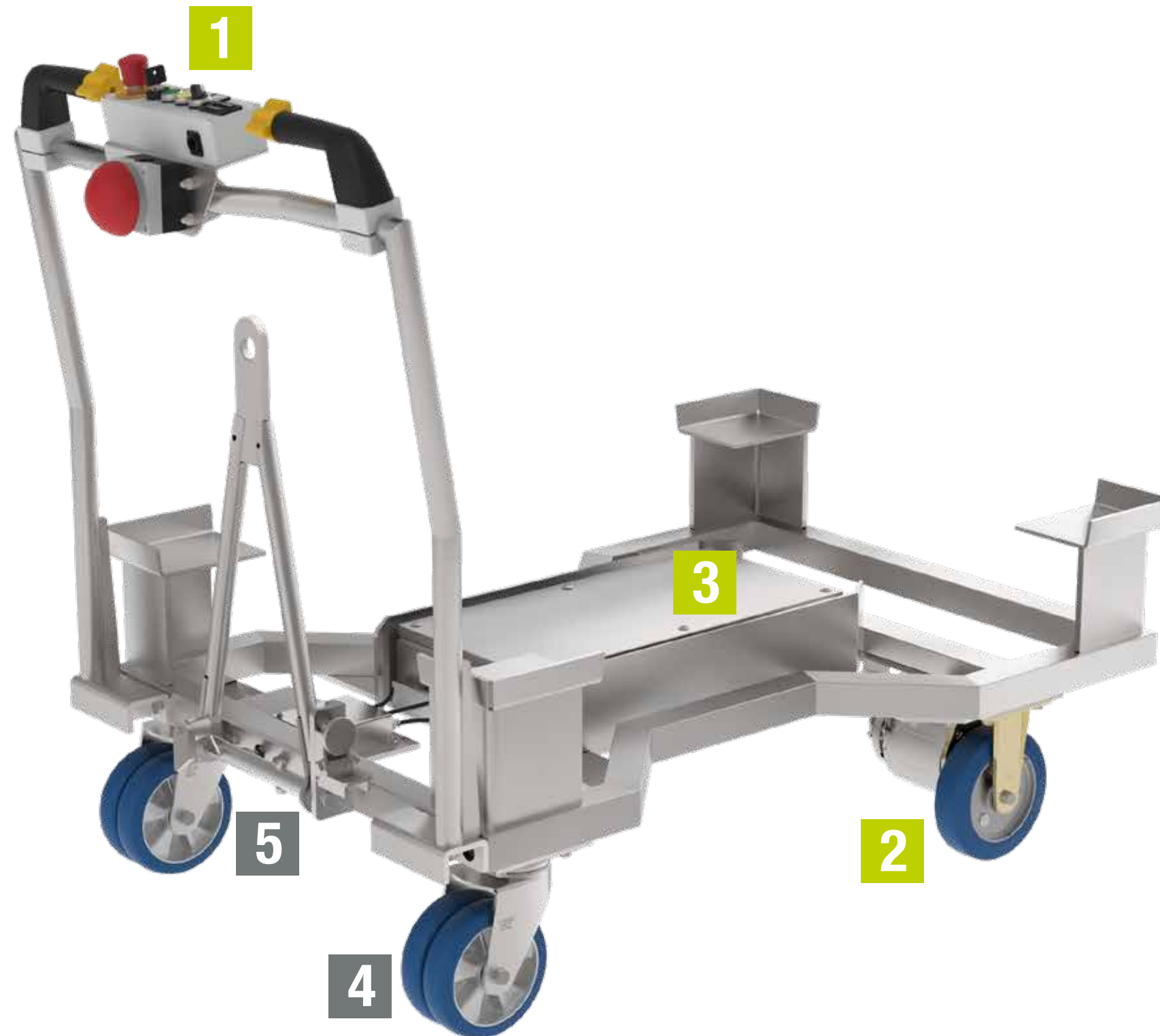
The ErgoMove 2000 can transport a total weight of up to 2,000 kilogrammes. In addition to the drive assistance, the ErgoMove 2000 also features steering and braking assistance. As part of the support structure, the electric drive system ensures smooth movement no matter the trolley weight.

Towing operation:

The version ErgoMove 2000T is also suited for towing operation at up to 16 km/h. In other words, no additional trailer or frame systems are required for tuggers to integrate the ErgoMove 2000 into existing trolley systems. This also eliminates the need for additional repacking, stacking or unloading activities. The Li-ion battery is recharged during towing by means of a recuperative system. The ErgoMove 2000T can therefore be used in three-shift operation without additional charging via the charging cable.

Safety:

The electric drive system already possesses all relevant safety features, such as emergency stop, anti-trap protection and electromechanical dead man's brake. This increases the personal protection and ensures safe goods transport without generating additional costs for upgrading the safety aspects of the system. Furthermore, the ErgoMove 2000 corresponds to the Machinery Directive 2006/42/EC with an installation declaration and installation instructions.

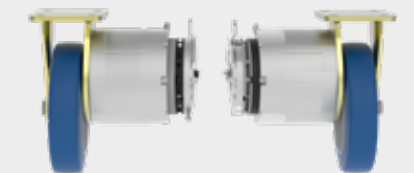


Set components

- 1 Cockpit and handles**
The set consists of the cockpit with two handles and a choice of one or two rotary joysticks.



- 2 Electrically-driven fixed castors**
The set always contains one left and one right fixed castor with a thrust force of max. 55 daN each.



- 3 Control box**
The set contains the control box with battery unit. This can be positioned anywhere on the trolley.



Optional features

- 4 Compatible swivel castors**
A large selection of suitable swivel castors can be found on page 15. Antistatic versions (-AS) are also available.

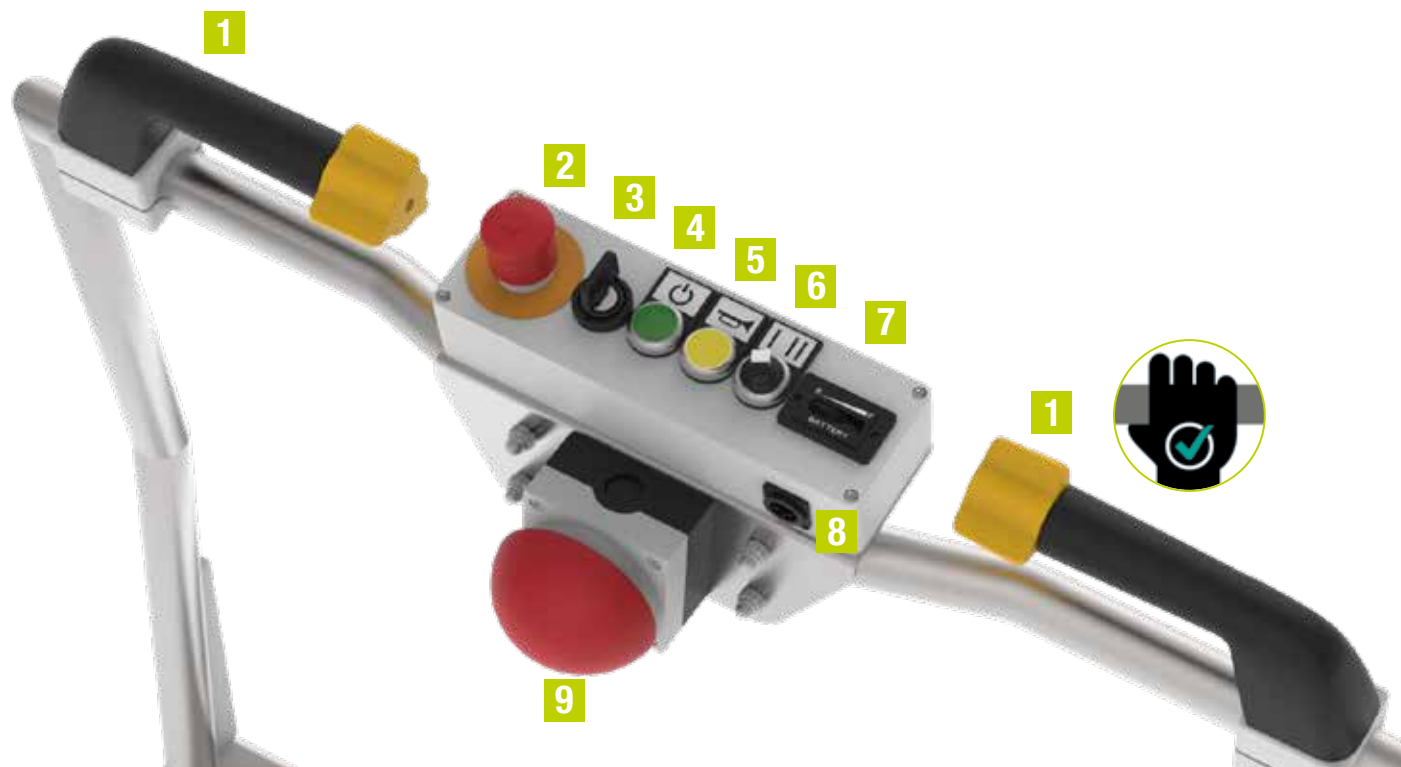
- 5 Emergency release**
Mechanical emergency release for the towable version with recuperation SET EM 2000T. More information can be found on pages 18 and 19.

ErgoMove 2000.

The cockpit and its functions.

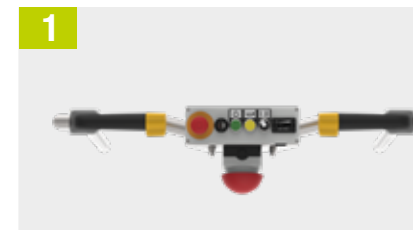
✓ Protection class IP65

The cockpit of the ErgoMove 2000 is available in two versions. The version with one rotary joystick is suited primarily for applications involving straight travel over long distances. In addition, the cockpit with two rotary joysticks offers the ability to easily manoeuvre heavy loads within even tight spaces.



- 1 Handle with rotary joystick and hand detection
- 2 Emergency stop button
- 3 Key switch
- 4 On button
- 5 Horn button
- 6 Mode "I" and "II"
- 7 Charge level display
- 8 Charging unit port
- 9 Anti-trap protection

Version 2: Cockpit with one rotary joystick



Simple operation

The ErgoMove 2000 is operated with a rotary joystick. The operation of the rotary joystick determines the drive torque of the two driven fixed castors. Depending on the mode, the two castors are controlled synchronously or individually. The operating handles also feature integrated sensor-based hand detection for unlocking the electro-mechanical dead man's brake.



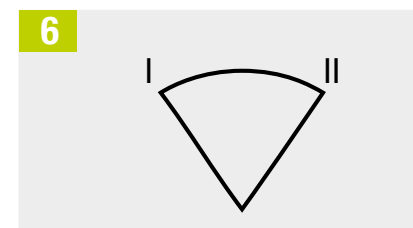
Emergency stop

In hazardous situations, the electric drive system can be switched off by operating the easily visible and quickly accessible emergency stop. This activates the electro-mechanical dead man's brake and brings the ErgoMove 2000 to a standstill.



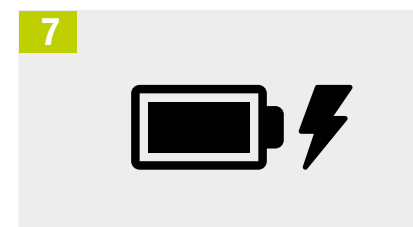
Horn

The horn of the ErgoMove 2000 is connected to the control box by a 1.5 metre cable and can be freely positioned on the trolley. It makes an important contribution to the safety of goods transports and is therefore required for a valid CE declaration.



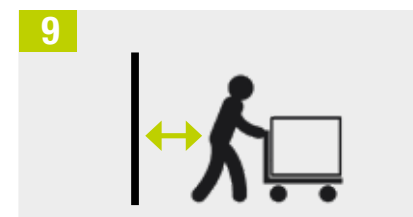
Mode "I" and "II"

Version with one rotary joystick: Mode I: Forward, reverse 2 km/h. Mode II: Forward 4 km/h, reverse 2 km/h. Version with two rotary joysticks: Mode I: Both motors are controlled together (forward 4 km/h, reverse 2 km/h). Mode II: Motors are controlled individually by the respective rotary joystick (forward, reverse 2 km/h).



Control box / battery

The control box contains the battery and control unit of the ErgoMove 2000 and represents the connection between the driven wheels and the cockpit. The ErgoMove 2000 is equipped with state-of-the-art rechargeable battery technology. At full capacity, the battery can make up to 500 starts with a load of 2,000 kg. The charge time is approximately four hours (90 percent of capacity).







Anti-trap protection

The anti-trap protection on the ErgoMove 2000 is implemented with a pressure-sensitive mushroom button. If the button is pressed against the operator, the trolley will go back a little in the opposite direction.

The ErgoMove 2000 set.
Order overview and scope of delivery.

The ErgoMove 2000 is a modular system. The possible combinations are listed in the table below. Additional options and spare parts are also available.

				
Description illustration*	Drive castor with wheel Ø 200 mm and total height 245 mm	Drive castor with wheel Ø 250 mm and total height 305 mm	1 handle with rotary joystick (-1FG) and 1 handle without rotary joystick	2 handles with rotary joysticks (-2FG)
Set 1: SET EM2000-BS-GBS 200K-ET-1FG	X	-	X	-
Set 2: SET EM2000-BS-GBS 200K-ET-2FG	X	-	-	X
Set 3: SET EM2000-BS-GBS 252K-ET-1FG	-	X	X	-
Set 4: SET EM2000-BS-GBS 252K-ET-2FG	-	X	-	X

* The scope of delivery also includes a control box with battery, a cockpit, a horn and the cables running from the various individual components to the control box. The charger is available as an option.

Versions and options available upon request

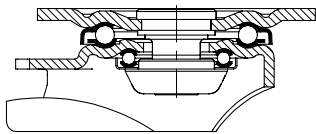
Options



	Charger with Schuko plug	Towable version with recuperation
Product code	EM-CHARGER-24V6A	SET EM 2000T...
Description	XLR socket (cable length 1.2 m) Charging voltage 24 V Charging current 6 A	Includes mechanical emergency release (refer to pages 18 and 19).

Set add-on.
Suitable swivel castors.

The Blickle standard range contains more than 30,000 products. This includes a number of swivel castors that can be combined with the ErgoMove 2000.

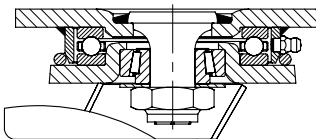


- Bracket: LH/LHD series**
- Strong pressed steel, zinc-plated, blue-passivated, Cr6-free
 - Heavy fork and top plate fitting
 - Double ball bearing in the swivel head, very stable central kingpin, bolted and secured
 - Particularly resistant to shocks and impact thanks to **specially shaped, hardened bearing seats**

ALBS



- Wheels: ALBS series**
- Tread: High-quality polyurethane-elastomer Blickle Bestthane® Soft, hardness 75 Shore A, blue, non-marking, non-staining
 - Wheel centre: Die-cast aluminium






- Bracket: LS series**
- Particularly robust welded steel construction, zinc-plated, yellow-passivated, Cr6-free
 - Axial grooved ball bearing ISO 104 and tapered roller bearing ISO 355 in the swivel head
 - Welded, very stable central kingpin, bolted and secured
 - Dust and splash-proof
 - Grease nipple

ALST-AS






- Wheels: ALST-...-AS series**
- Tread: High-quality polyurethane-elastomer Blickle Softthane®, hardness 75 Shore A, grey, non-marking, non-staining, **antistatic**
 - Wheel centre: Die-cast aluminium

Compatible swivel castors (see below for images)	Wheel Ø [mm]	Wheel width [mm]	Load capacity at 4 km/h [kg]	Load capacity at 16 km/h [kg]	Total height [mm]	Plate size [mm]	Bolt hole spacing [mm]	Bolt hole Ø [mm]
LHD-ALBS 181K*	180	2 x 44	800	420	235	140 x 110	105 x 75-80	11
LHD-ALST 181K-AS* 	180	2 x 44	800	360	235	140 x 110	105 x 75-80	11
LH-ALBS 200K	200	50	700	280	245	140 x 110	105 x 75-80	11
LH-ALST 200K-AS 	200	50	700	220	245	140 x 110	105 x 75-80	11
LS-GBS 252K-03	250	80	1400	560	305	140 x 110	105 x 75-80	11
LS-GST 252K-03-AS 	250	80	1400	420	305	140 x 110	105 x 75-80	11

Options

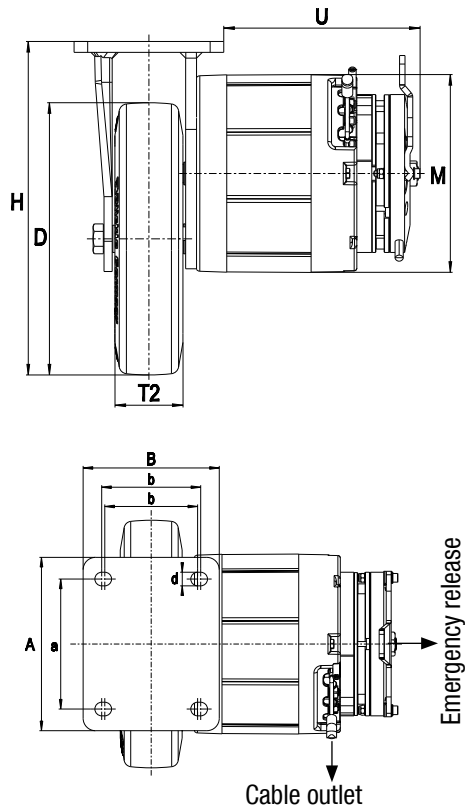


Product code	Illustration LH-ALBS 200K	Illustration  LH-ALST 200K-AS	Illustration LS-GBS 252K-03	Illustration  LS-GST 252K-03-AS	Illustration LHD-ALBS 181K*	Illustration LHD-  181K-AS*	Swivel castor with foot guard
Description	Pressed steel swivel castor	Pressed steel swivel castor, antistatic	Welded steel swivel castor	Welded steel swivel castor, antistatic	For perfect swivel	For perfect swivel, antistatic	Item suffix -FS, on request

* For use of LHD-ALBS 181K and LHD-ALST 181K-AS, the steel adapter plate **APS3-10** is required.

Technical details.
The drive castors.

✓ Protection class IP44



Fixed castor with electric drive system	Wheel Ø (D) [mm]	Wheel width (T2) [mm]	Load capacity at 4 km/h [kg]	Load capacity at 16 km/h [kg]	Total height (H) [mm]	Plate size (A x B) [mm]	Bolt hole spacing (a x b) [mm]	Bolt hole Ø (d) [mm]	Motor Ø (M) [mm]	Motor protrusion (U) [mm]
EM2000-BS-GBS 200K-ET-L	200	50	700	280	245	140 x 110	105 x 75-80	11	145	140
EM2000-BS-GBS 200K-ET-R	200	50	700	280	245	140 x 110	105 x 75-80	11	145	140
EM2000-BS-GBS 252K-ET-L	250	80	1200	480	305	140 x 110	105 x 75-80	11	145	160
EM2000-BS-GBS 252K-ET-R	250	80	1200	480	305	140 x 110	105 x 75-80	11	145	160

"-L" for left castor and "-R" for right castor. Includes cables (3 metres) for brake, hall sensors and motor.

Welded steel heavy duty fixed castor with electric drive and integrated dead man's brake. Wheel with polyurethane tread Blicke Besthane® Soft, with cast iron wheel centre.

Bracket:

- Particularly robust welded steel construction, zinc-plated, yellow-passivated, Cr6-free

Tread:

- High-quality polyurethane-elastomer Blicke Besthane® Soft, hardness 75 Shore A
- Outstanding operational comfort thanks to particularly thick, elastic tread
- Excellent floor preservation, low-noise operation
- Very low rolling resistance
- High dynamic load capacity
- High abrasion resistance
- High cut and tear propagation resistance
- Colour blue, non-marking, non-staining
- Very good chemical bond with the wheel centre

Wheel centre:

- Made from robust grey cast iron, lacquered, colour silver
- Wheel Ø 250 mm with grease nipple

Drive:

- Brushless DC motor with integrated electro-mechanical brake system (dead man function, 60 Nm static holding torque) with emergency release on every fixed castor
- Thrust force max. 55 daN per motor used

The electrically driven fixed castors are already included in the set but are also available as individual components.

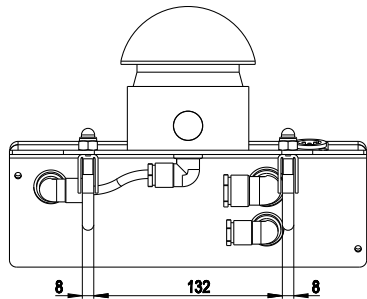
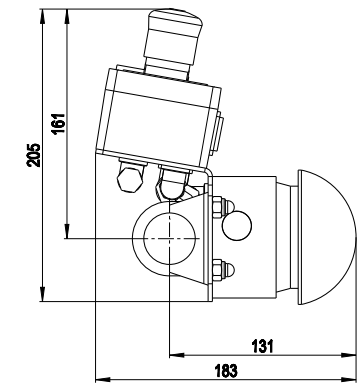


Technical details.
The cockpit.

✓ Protection class IP65

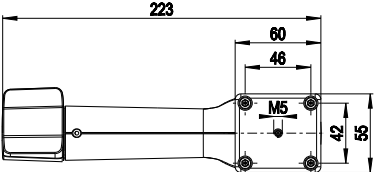
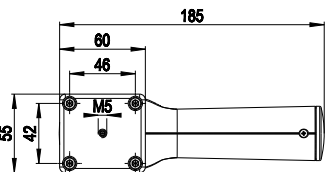
Cockpit dimensions

Assembly takes place with bracket clips for pipe diameter 33-36 mm. Control box cables are included in the scope of supply (each 3 m).

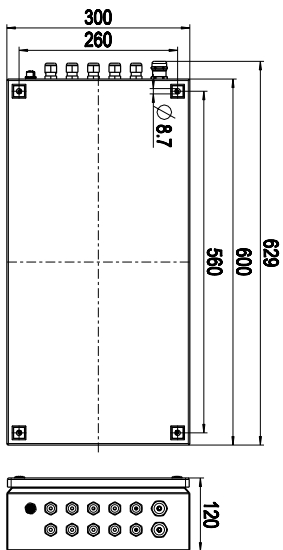


Handle dimensions with and without rotary joystick

Control box cables are included in the scope of supply (each 3 m).



Dimensions of the control box with integrated control and battery unit



Control box and horn assembly

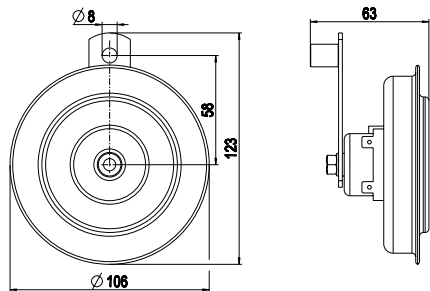
The control box and horn can be fitted using the dimensions in the diagrams.

Battery unit (integrated into control box)

Li-Ion battery, 22 Ah, 580 Wh at 24 V, approximately 4 h to charge (for 90% capacity) at 6 A current.

Horn

The horn is attached and connected to the control box. 110 db, 24 V, cable length 1.5 m, flexible positioning.



For use in towing operation: The ErgoMove 2000T. Recuperative system and emergency release.

Recuperation of the battery during towing operation

The ErgoMove 2000T version is also suitable for towing at up to 16 km/h. Another advantage is that the battery recharges during the towing operation by means of a recuperative system. Battery charging is reduced to a minimum with regular use and sufficient travel distance.

The electro-magnetic brake system must be released in towing operation in order to prevent damage to the electric drive castors. For this purpose, ErgoMove 2000T has an emergency release for the brakes. When installing the set, the brakes need to be connected with the emergency release.

Functioning of the emergency release

The draw-bar is lowered on the trolley while attaching it to a trailer. A cam attached to the trolley draw-bar moves the plunger of the emergency release. This causes the brakes to release mechanically. The control is activated in towing operation by means of the electric coupling switch.

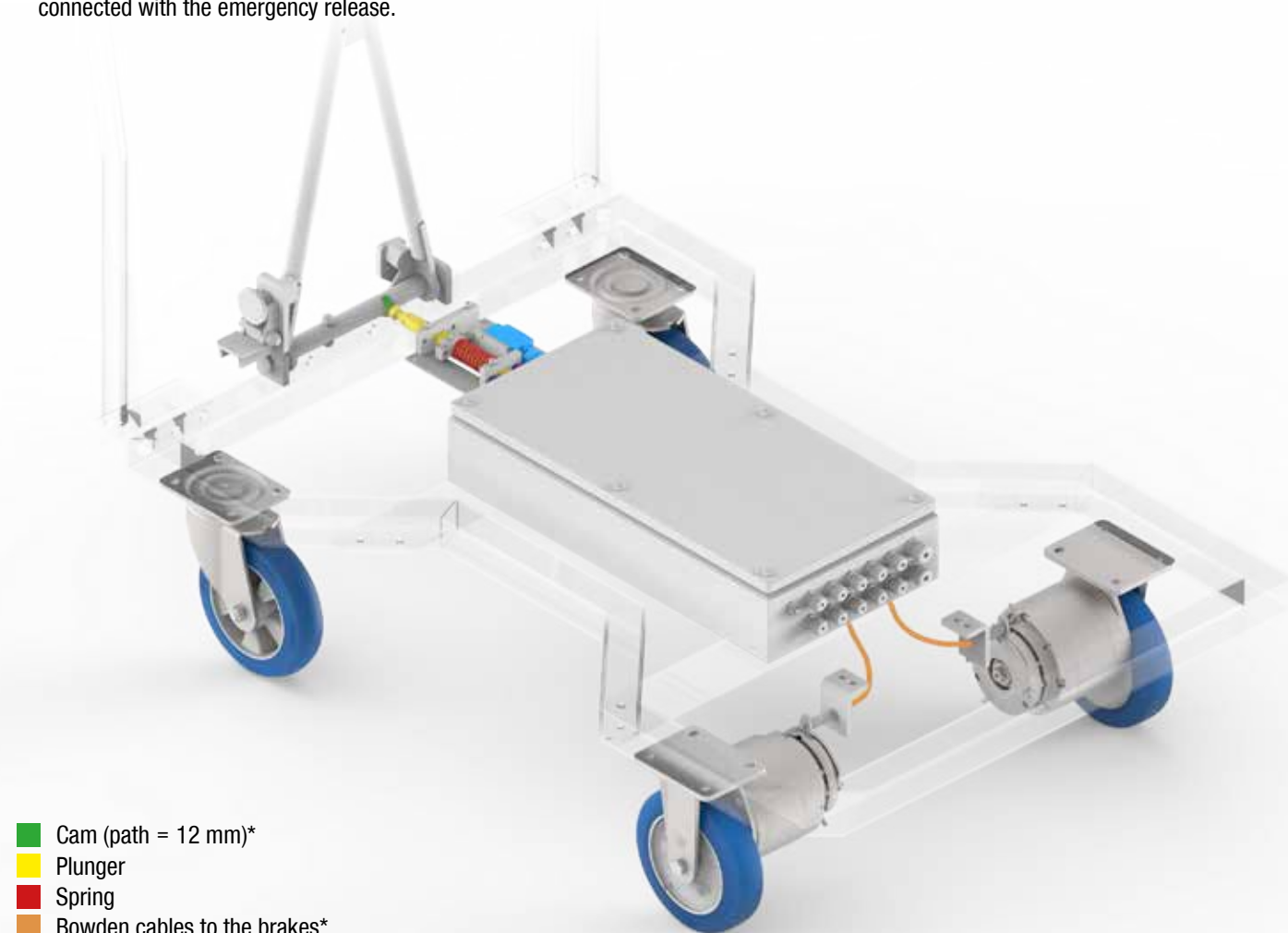
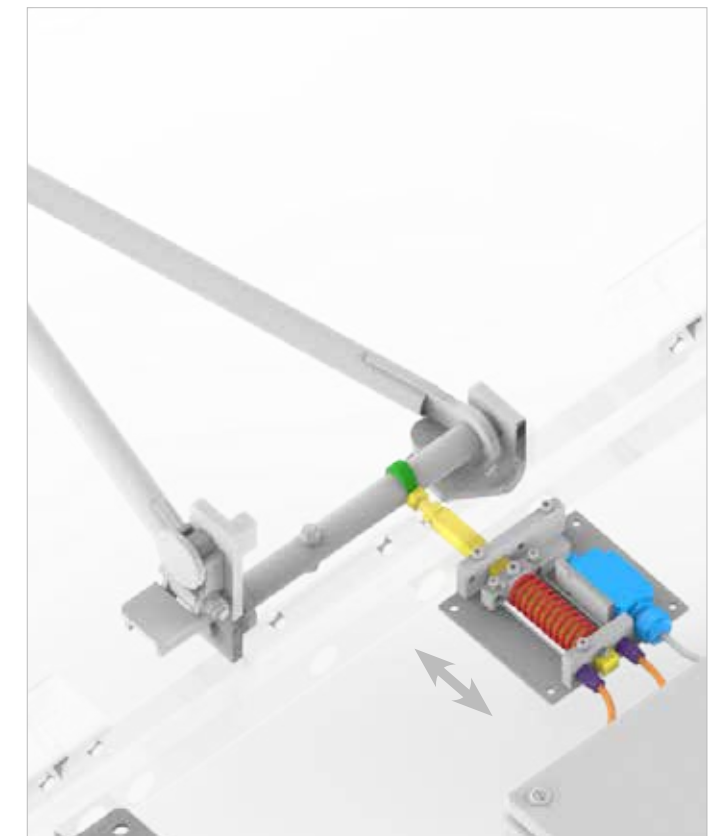
Illustration 1: Raised draw-bar

When the draw-bar is raised, the Bowden cables are not under tension, and the brakes close mechanically.



Illustration 2: Lowered draw-bar

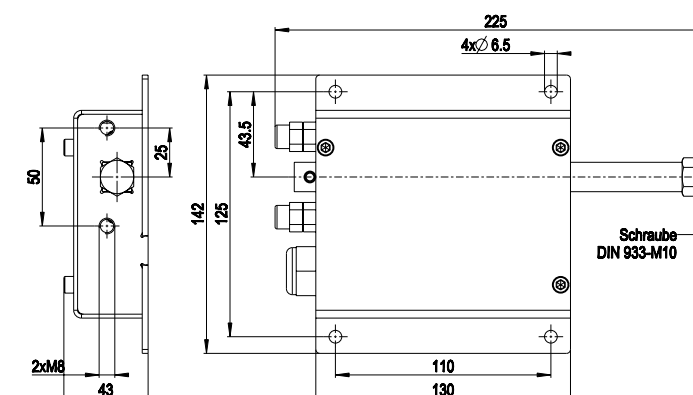
When the draw-bar is lowered, the Bowden cables are under tension, and the brakes open mechanically.



- Cam (path = 12 mm)*
- Plunger
- Spring
- Bowden cables to the brakes*
- Set screws for Bowden cable cover, outer diameter 3 mm
- Electric coupling switch

* The cam and the Bowden cables are not included in the scope of supply. The cam needs to be installed on the draw-bar in such a way that the emergency release is activated in the raised position.

Mechanical emergency release dimensions

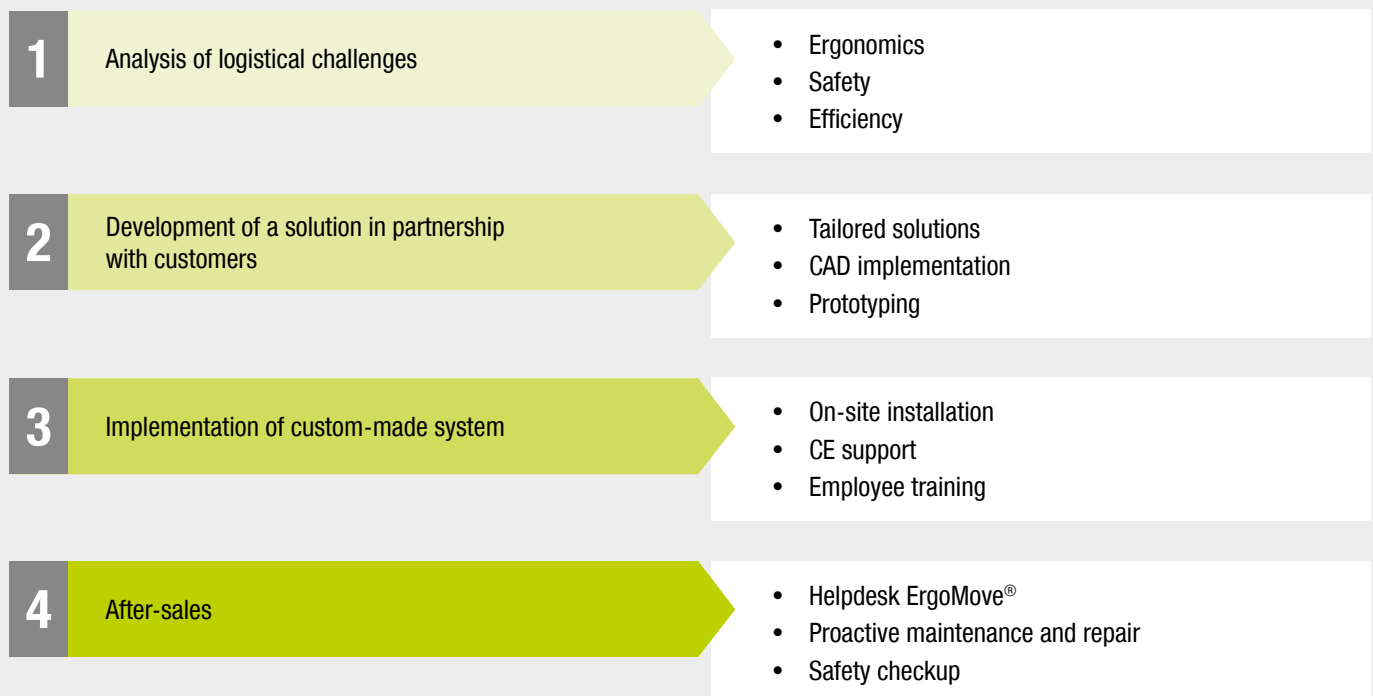


“Our vision is to create the most ergonomic and safe e-mobility solutions for every working person.”

Blickle's electric drive systems and ergonomic e-mobility solutions marketed under the ErgoMove® brand provide a safe and easy way to transport loads up to 4,000 kilograms in a variety of sectors. The experts at ErgoMove® work closely together with customers to develop solutions which are tailored to their specific requirements.

Blickle's effective service team provides around the clock support for users before and after they start using the ErgoMove® system.

As a reliable partner, Blickle provides a comprehensive range of logistical services to complement ErgoMove®'s e-mobility solutions:



The EM500, EM1000, EM2000 and EM4000 lines of the Blickle ErgoMove® system can be used to create custom-made solutions capable of handling loads of up to four tons.

To find out more, please contact your Blickle ErgoMove® specialists:

Email: ErgoMove@blickle.com



To find out more about ErgoMove® systems, please visit www.blickle.com/ErgoMove