

# Moving everything. Anywhere.

ErgoMove® –  
The individual  
and modular electric  
drive system for  
in-company  
transportation.



The system  
control concepts,  
drive concepts  
and options.

AN IDEA THAT MAKES A DIFFERENCE

# The concept for a better world of work.

We reinvent ergonomics.



Logistical processes are complex, coordinated and highly automated so that goods can be transported from A to B cost-effectively, quickly and reliably. Nevertheless, there are always things that do not fit into the scheme. In such cases, employees have to move heavy loads manually.

## The challenge

In many situations, even conventional tools such as pallet trucks, forklifts or electric tugs are not suitable: tight spaces, bulky loads, limited turning circles. It has to be moved „by hand“. The consequences: physical overload, safety risks or processes being slowed down. More intelligent solutions are needed to make workplaces ergonomic, safe and attractive.

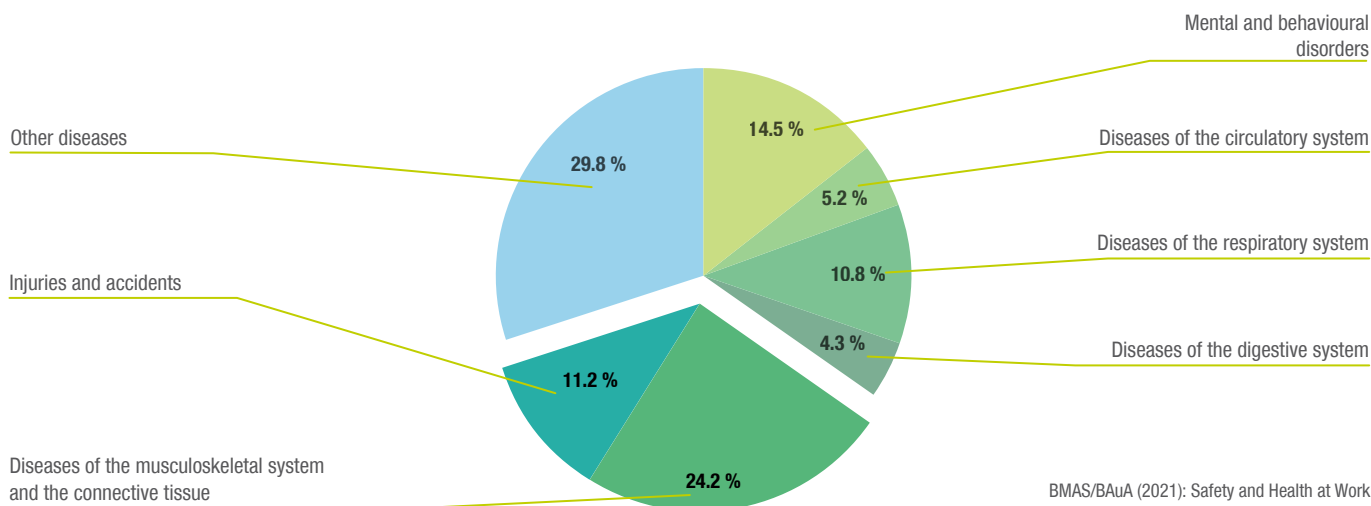
## The answer: ErgoMove

ErgoMove is a unique electric drive system. Based on the latest developments in the field of electromobility, ergonomic findings and extensive field studies, Blicke has developed a portfolio of e-mobility solutions with which a person can move, manoeuvre and stop loads of up to 4,000 kilograms intuitively, safely and without physical effort by hand. Accidents at work are avoided, sick days are reduced and more efficient processes are created. A real win-win situation for workers and the company.

## Distribution of incapacity to work

### Musculoskeletal disorders cause the most days of absence.

More than a third of all absences from work are due to musculoskeletal disorders, injuries and accidents (35.4 %).



BMAS/BAuA (2021): Safety and Health at Work  
Reporting Year 2021  
Download from [www.baua.de/suga](http://www.baua.de/suga)





## ErgoMove – the benefits



### Heavy loads

Up to four tons of load can be moved, maneuvered, and safely braked by a single employee without physical strain.



### Narrow paths and bulky loads

The steering assistance (differential drive) of the two drive wheels in combination with two or four castor wheels makes it easy to manoeuvre devices equipped with ErgoMove around corners. Additionally, smaller turning circles can be achieved compared to conventional solutions.



### 24/7 operation

With standard interchangeable batteries, ErgoMove systems can be reliably used in a multi-shift operation at any time, ensuring continuous and secure processes.



### Frequent Start-Stop cycles

Even when transporting light loads, a high frequency of start-stop cycles can lead to significant physical strain for workers. ErgoMove systems are particularly helpful in protecting the health of employees in such scenarios while simultaneously enhancing process efficiency.

# A perfect solution considers every detail.

The ErgoMove system takes everyone and everything further.

**ErgoMove is a highly flexible, modular system that equips various means of transport vehicles, machines and systems with electrically operated driving, manoeuvring and braking support via plug & play.**

## The idea

Four aspects were in focus during the development of ErgoMove:

- How can the interface between human and transport device be designed as intuitively as possible while still encompassing all safety features?
- How can the interface between surface and transport device, as well as the electrical drive solution, be designed to be as powerful and compact as possible?
- How should the product portfolio be structured to be flexible and modular, allowing adaptation to various applications?
- How can an accessory kit be defined to enable individual and easy customization of the systems for different operating conditions?

## The system concept

The result: a product family comprising various control concepts, drive concepts, and accessories that adhere to the highest industrial standards.

This allows everything to be transported ergonomically and safely to any location:

**ErgoMove. Moving everything. Anywhere.**



### Automation meets flexibility

In situations where fully automated solutions (such as AGVs) are too complex and expensive, the electric drive systems of the ErgoMove brand provide a highly flexible and cost-effective solution.



### Fluid and fluctuating loads

With a finely tuned and configurable control of the drive wheels, even containers with liquids or bulk goods can be gently approached.



## ErgoMove – the system

control concepts, drive concepts and options.








# The systems at a glance.

The right power for every application: ErgoMove offers seven different series in four performance classes from 500 to 4,000 kilograms. An optimised set of powered fixed castors with powerful motors, cockpit systems and accessory components has been developed for each performance class. What they all have in common is a comprehensive safety concept.



**ErgoMove 500**  
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**ErgoMove 1000**  
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		ErgoMove 500 page 18	ErgoMove 1000 page 20
	<b>Weight class up to</b>	500 kg	1,000 kg
	<b>Plug &amp; play</b>	✓	✓
	<b>Speed up to</b>	5 km/h	4 km/h
	<b>Towing operation up to</b>	–	–
	<b>High technical adaptability</b>	–	–
	<b>Individual parameterisation</b>	✓ (Control Center)	upon request
<b>Control concepts</b>	 <b>Sensor handle</b> page 9	✓	–
	 <b>Handle with rotary joystick</b> page 9	✓	–
	 <b>Ergonomic-Cockpit with power sensor</b> page 10	–	✓
	 <b>Ergonomic-Cockpit with two rotary joysticks</b> page 10	–	✓
	 <b>Flex-Cockpit with one rotary joystick</b> page 11	–	–
	 <b>Flex-Cockpit with two rotary joysticks</b> page 11	–	–
	 <b>Flex-Cockpit Remote Control</b> page 11	–	–
<b>Drive concepts</b>	<b>Drive castors</b>	2 fixed castors (wheel-Ø 140 mm)	2 fixed castors (wheel-Ø 160 mm / 190 mm)
	<b>Drive assistance</b>	✓	✓
	<b>Steering assistance</b>	✓ (Variant sensor handle)	✓
	<b>Brake assistance through motor brake</b>	✓	✓
	<b>Brake system with integrated dead man's brake</b>	–	✓
	<b>Recuperation during towing operation</b>	–	–



**ErgoMove 1000T**  
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**ErgoMove 2000P**  
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**ErgoMove 2000 + 2000T**  
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**ErgoBoost**  
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1,000 kg	2,000 kg	2,000 kg	4,000 kg	500 kg
✓	✓	–	–	✓
4 km/h	4 km/h	4 km/h	2 km/h	3 km/h
✓ 10 km/h	–	✓ 16 km/h (variant EM2000T)	–	–
–	–	✓	✓	–
upon request	upon request	upon request	upon request	upon request
–	–	–	–	–
–	–	–	–	✓
✓	✓	–	–	–
✓	✓	–	–	–
–	–	✓	upon request	–
–	–	✓	✓	–
–	–	–	✓	–
2 fixed castors (wheel-Ø 190 mm)	2 fixed castors (wheel-Ø 200 mm)	2 fixed castors (wheel-Ø 200 mm / 250 mm)	2 fixed castors (wheel-Ø 250 mm)	1 spring-loaded fixed castor (wheel-Ø 150 mm)
✓	✓	✓	✓	✓
✓	✓	✓ (variant 2 rotary joystick)	✓ (variant 2 rotary joysticks+ Remote)	–
✓	✓	✓	✓	✓
–	✓	✓	✓	optional
–	–	✓ (variant EM2000T)	–	–

# ErgoMove control concepts.

It's simple. And good.

Safe handling and intuitive operation – that's what distinguishes the innovative ErgoMove control concepts. They were developed in collaboration with renowned universities such as the University of Stuttgart, the University of Saarland, and the Heilbronn University. High-quality materials and components ensure robustness and guarantee trouble-free operation. All control concepts can be easily adapted to existing machines and equipment.

## The elements:

- A cockpit that consolidates all important functions and information for the user
- Controls that enable optimal ergonomic use and intuitive operation
- A controller that serves as the central hub for ErgoMove with the ErgoMove software
- A battery unit consisting of proven, industrially tested batteries

## The safety:

A comprehensive safety concept according to DIN EN ISO 3691-5 for pedestrian-controlled industrial trucks ensures that accident risks are minimised:

- Emergency stop with emergency brake function
- Brake release through sensor hand recognition as protection against uncontrolled movement
- Key switch as protection against unauthorised starting
- Horn as an acoustic warning device
- Anti-trap protection
- Motor brake and electromechanical dead man's brake bring equipment to a stop when released
- Electromechanical dead man's brakes as parking brakes





## Control concept compact for the series ErgoMove 500 and ErgoBoost

This control concept is characterised by its particularly compact design and is therefore especially well-suited for integration into existing devices and machinery.



### Variant 1: Sensor handle with pre-assembled bracket (-SxxxU)

- Intuitive driving and steering through integrated force sensing
- Button for differential lock during straight-line driving
- Available in various lengths
- Forward and reverse speed of 5 km/h
- Automatic recognition of single/dual-hand operation
- Only available for ErgoMove 500



### Variant 2: Handle with rotary joystick (-1FG)

- Simple and precise operation
- Ideal for longer straight-line drives or applications where the stability of the vehicle is not sufficient for the sensor handle
- Available as left or right handle variant
- Speeds:  
ErgoMove 500: Forward and reverse 5 km/h; ErgoBoost: Forward and reverse 3 km/h

### Power supply unit

- Battery holder and 2 interchangeable batteries (18 V, 5.2 Ah) included
- Basic Box variant: Battery isolator switch to interrupt power supply
- Safety Box variant: Emergency stop according to machinery directive, as well as key switch for operation authorization
- For the ErgoBoost series, power is supplied through a single interchangeable battery connected by a battery holder

#### Basic Box



#### Safety Box



### Assembly instructions

- Variant sensor handle and rotary joystick: Pre-assembled cables (each 3 m) to the drive wheels and the cockpit
- Variant sensor handle: Available optionally without pre-assembled bracket
- Variant rotary joystick: Mounting plate for installation (pipe clamps for tube mounting available optionally)

# CONTROL CONCEPTS

## Control concept Ergonomic-Cockpit for the series ErgoMove 1000, 1000T and 2000P

This control concept is distinguished by its extensive safety technology and intuitive operation, providing the highest level of user comfort.



### Variant 1: Ergonomic-Cockpit with power sensor (-EG)

- Especially intuitive operation through integrated force sensing
- The slightest forces applied by the operator to the cockpit are detected and transferred to the drive rollers
- Steering assistance in single or dual-hand operation
- Automatic recognition of single/dual-hand operation



### Variant 2: Ergonomic-Cockpit with two rotary joysticks (-2FG)

- Operation through rotary joystick
- Precise maneuvering in dual-hand operation, straight-line driving in single-hand operation
- Automatic recognition of single/dual-hand operation



### Variant 3: SWITCH&MOVE

- Pluggable cockpit unit (EM-EG-SM) with the ability to operate multiple chassis with just one cockpit
- High-quality plug connection with locking lever on the plug adapter (including plastic cover)
- Reduction of ErgoMove investment costs by using one cockpit for multiple trolleys (cost advantage from 3 systems onwards)
- Optionally available as a variant with two rotary joysticks (EM-2FG-SM)

#### Integrated into the cockpit:

- Control and two interchangeable batteries (18 V, 5.2 Ah)
- Pre-assembled cables (each 3 m) to the drive rollers
- Pinch protection via force sensing or mushroom button

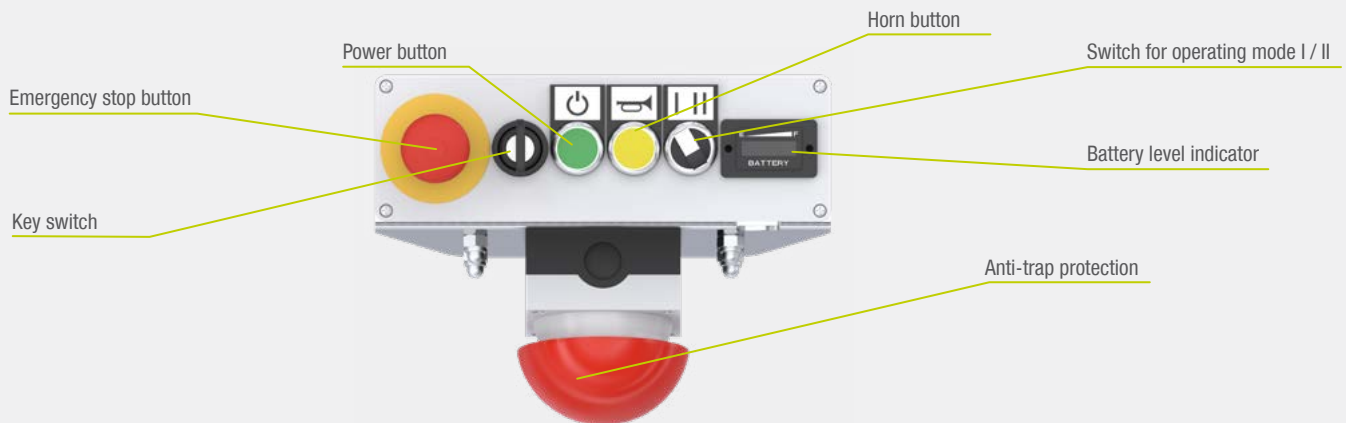
#### Assembly instructions:

- Ergonomic-Cockpit variant with power sensor: Mounting directly on the application through screwing or using a central adapter tube on the cart (optionally available)
- Ergonomic-Cockpit variant with two rotary joysticks: Mounting on existing cart tubes using bracket clamps

## Control concept Flex

for the series ErgoMove 2000, 2000T and 4000

This control concept is characterised by its high robustness and mechanical customizability, making it flexible for use in very specialised applications.



### Variant 1: Flex-Cockpit with one rotary joystick (-1FG)

- Simple operation (without steering assistance)
- Ideal for longer straight-line drives
- Operating mode I: EM2000: forward 2 km/h – reverse 2 km/h
- Operating mode II: EM2000: forward 4 km/h – reverse 2 km/h



### Variant 2: Flex-Cockpit with two rotary joysticks (-2FG):

- Simple operation including steering assistance
- Small turning radius through differential control
- Selectable single or dual-hand operation
- Operating mode I: Motors are controlled synchronously  
EM2000: forward 4 km/h – reverse 2 km/h  
EM4000: forward 2 km/h – reverse 1 km/h
- Operating mode II: Motors are controlled individually (precise maneuvering)  
EM2000: forward and reverse 2 km/h; EM4000: forward and reverse 1 km/h



### Variant 3: Flex-Cockpit Remote Control (-RC)

- Wired cockpit for challenging visibility conditions
- Provides better visibility of the application and the track while driving
- Carrying strap for easier handling of the cockpit (upon request)
- Operating mode I: Motors are controlled synchronously  
EM4000 forward 2 km/h – reverse 1 km/h
- Operating mode II: Motors are controlled individually (precise maneuvering)  
EM4000 forward and reverse 1 km/h
- Only available for ErgoMove 4000



### Power supply unit

- Integrated control and battery unit
- Li-Ion battery, 21 Ah, 25 V
- Dimensions: 300 x 630 x 120 mm
- Optional with replaceable battery box available

### Assembly instructions

- Variant Flex-Cockpit with 1 or 2 rotary joysticks: Mounting via bracket clamps for tube diameters 33-36 mm; includes cables to the control box (3 m)



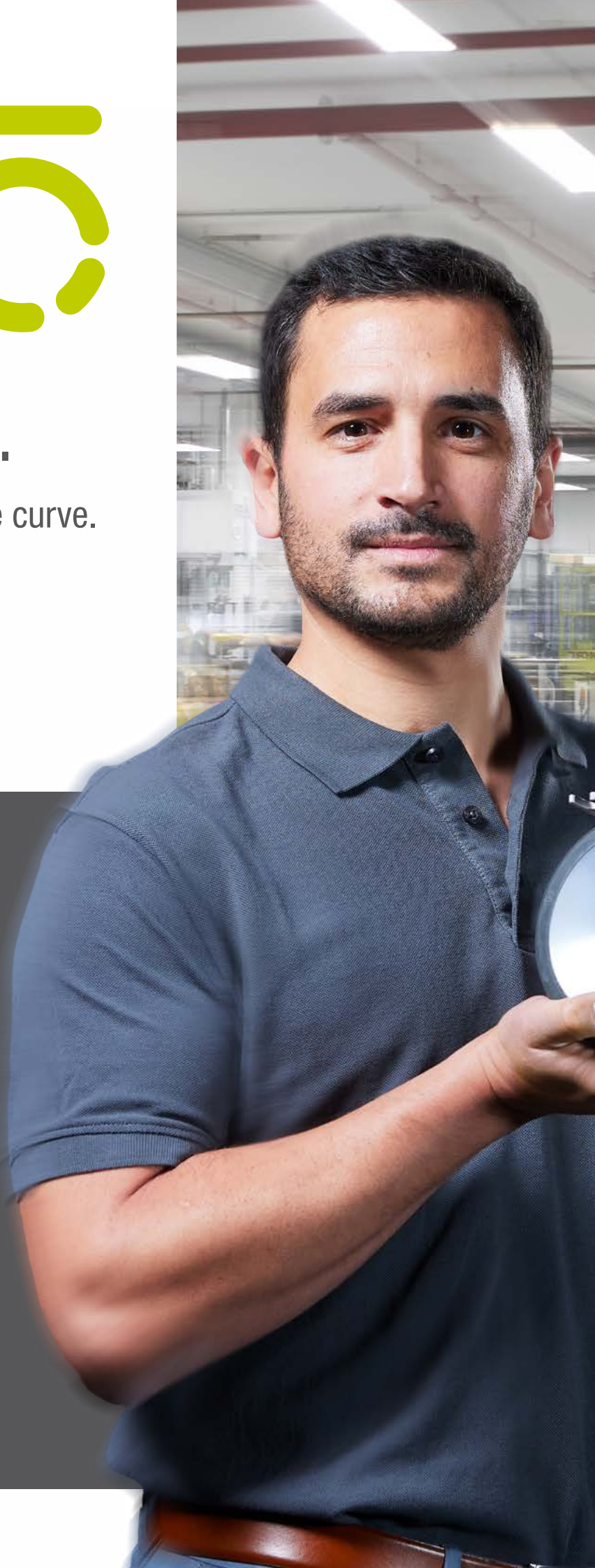
# ErgoMove drive concepts.

Think forward. And navigate the curve.

The drive units consist of brushless DC motors in various power classes with two driven load-bearing fixed castors. Only the compact ErgoBoost series relies on a single, non-load-bearing fixed castor.

What is important to us: high smoothness, long lifespan, robust construction, high efficiency, high power density, compact design, and high energy efficiency.

The load-bearing fixed castors, in conjunction with Blicke premium tread materials, ensure optimal traction. Additionally, these systems facilitate steering and ensure that even heavy loads can be securely braked with electromechanical parking brakes. Depending on the model, each motor provides thrust forces ranging from 15 daN to 110 daN. For towing operations, there are drive solutions where the batteries can be recharged through recuperation.



## ErgoMove 500



### ErgoMove 500:

**For up to 500 kilograms system load at 5 km/h**

Combinable with the Control concept compact

- Two electrically driven fixed castors
- High-quality polyurethane tread Blicke Softhane®, antistatic (75 Shore A)
- Very high driving comfort due to the particularly elastic tread
- Very floor preservative, traceless, quiet operation
- Housing made of aluminum die-casting
- Brushless DC motor integrated into the roller, electric counter-current brake
- Thrust force of 15 daN per motor
- Protection class IP 44

## ErgoMove 1000

- Two electrically driven fixed castors
- High-quality polyurethane tread Blicke Besthane® Soft (75 Shore A)
- Very high driving comfort due to the particularly thick, elastic tread
- Very floor preservative, traceless, quiet operation
- Housing made of robust cast iron, galvanised with blue passivation, Cr6-free
- Brushless DC motor
- Thrust force of 30 daN per motor
- Protection class IP 40, IP 44 upon request



### Variant 1 ErgoMove 1000:

**For up to 1,000 kilograms system load at 4 km/h**

Combinable with the control concept Ergonomic-Cockpit

- Highest safety due to electromechanical parking brake (dead man's function)



### Variant 2 ErgoMove 1000T:

**For up to 1,000 kilograms system load at 10 km/h**

Combinable with the control concept Ergonomic-Cockpit

- Towing version as a double castor
- Without electromechanical parking brake (without dead man's function)
- Automatic detection of towing operation

## ErgoMove 2000

- Two electrically driven fixed castors
- High-quality polyurethane tread Blicke Besthane® Soft (75 Shore A)
- Very high driving comfort due to the particularly thick, elastic tread
- Very floor preservative, traceless, quiet operation
- Housing made of particularly robust steel welded construction, galvanised with yellow passivation, Cr6-free
- Brushless DC motor with integrated electromechanical parking brake (dead man's function)
- Thrust force of 55 daN per motor



### Variant 1 ErgoMove 2000P:

**For up to 2,000 kilograms system load at 4 km/h**

Combinable with the control concept Ergonomic-Cockpit

- Motor protection as standard
- Optionally available in a 90° angle version for confined spaces or narrow cart frames
- Protection class IP 40 (IP 44 upon request)



### Variant 2 ErgoMove 2000:

**For up to 2,000 kilograms system load at 4 km/h**

Combinable with the control concept flex (1 or 2 rotary joysticks)

- Protection class IP 44 (IP 65 upon request)

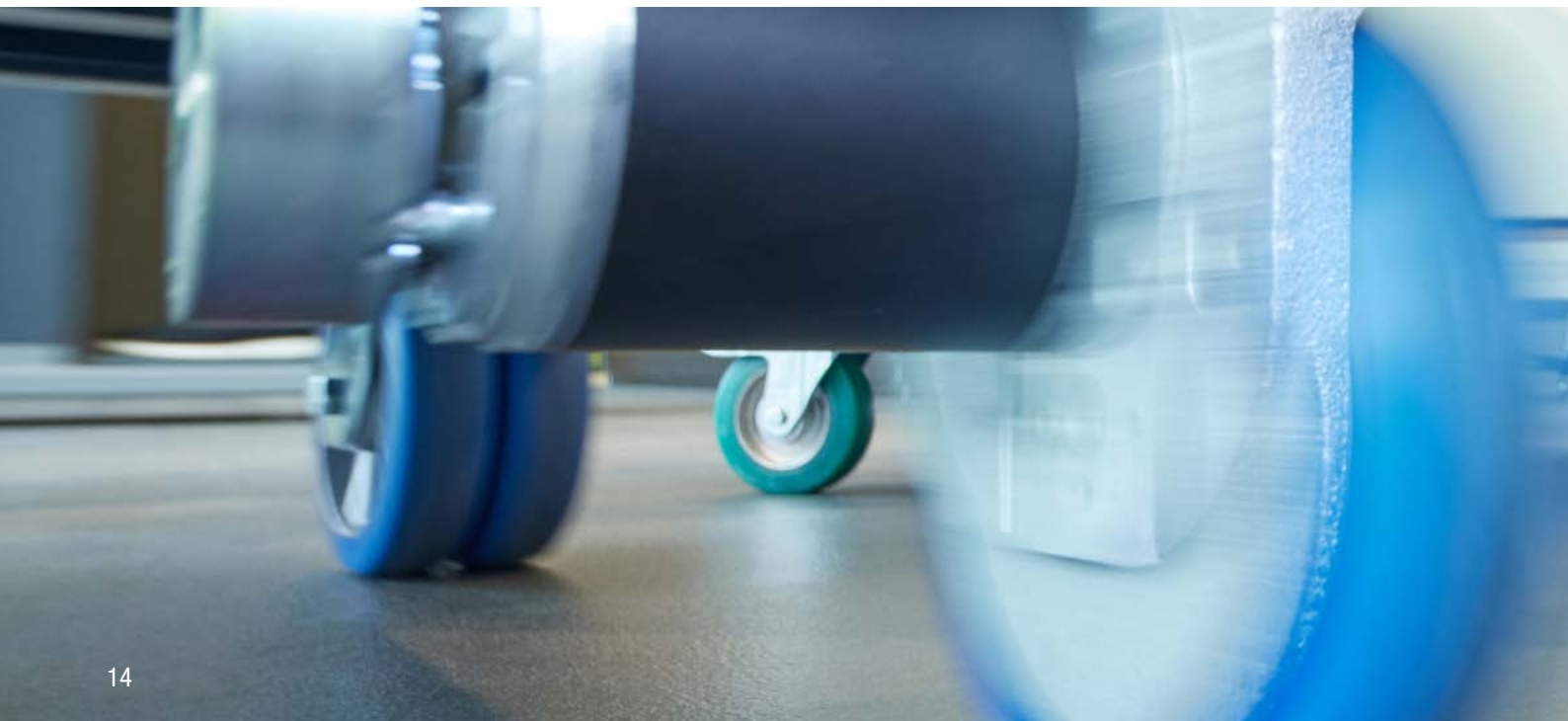


### Variant 3 ErgoMove 2000T:

**For up to 2,000 kilograms system load at 16 km/h**

Combinable with the control concept flex (1 or 2 rotary joysticks)

- Towable version
- Mechanical release of the dead man's brake during towing operation using an additional unit (forced release)
- Charging of the battery during towing operation through recuperation
- Protection class IP 44



## ErgoMove 4000



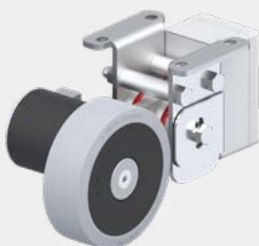
### **ErgoMove 4000:**

**For up to 4,000 kilograms system load at 2 km/h**

Combinable with the control concept flex

- Two electrically driven fixed castors
- High-quality polyurethane tread Blicke Besthane® Soft (75 Shore A)
- Very high driving comfort due to the particularly thick, elastic tread
- Very floor preservative, traceless, quiet operation
- Housing made of particularly robust steel welded construction, galvanised with yellow passivation, Cr6 free
- Brushless DC motor with integrated electromechanical parking brake (dead man's function)
- Thrust force of 110 daN per motor
- Protection class IP 44 (IP 65 upon request)

## ErgoBoost



### **ErgoBoost:**

**For up to 500 kilograms load at 3 km/h**

Combinable with the control concept compact (handle with rotary joystick)

- One electrically driven swivel castor
- High-quality elastic solid rubber „Blickle EasyRoll“ in low-friction quality (65 Shore A)
- Very floor preservative, traceless, quiet operation
- Housing made of strong sheet steel, galvanised with blue passivation, Cr6-free
- Excellent spring and damping properties due to patented disc spring construction
- Brushless DC motor, electric brake (mechanical dead man's brake upon request)
- Thrust force of 30 daN
- Protection class: IP 40 with electromechanical parking brake (IP 44 upon request)



SERVICES AND ACCESSORIES

# ErgoMove services and accessories.

We complete the offer.



We always support our customers. Even before the purchase, we provide detailed advice on the system's possibilities, analyze the situation and requirements, and then assemble the suitable, tailor-made ErgoMove system. A range of accessories for drive and control concepts complements the modular concept of ErgoMove. To ensure that our customers feel optimally supported before, during, and after the purchase, we have also developed a comprehensive service package specifically for ErgoMove drive systems.





## The ErgoMove service portfolio – Four steps to the perfect solution

### Challenge

- **Analysis:** Together, we thoroughly analyze the logistical challenges our customers face, ensuring that ergonomics, safety, and efficiency are optimally aligned.

### Solution concept

- **Integration:** Based on the individual logistical challenges, we design and develop tailored solutions. We also assist in the CAD implementation of the ErgoMove solution into the existing application.
- **Practical test (Proof-of-concept):** With an optional prototype available for lease or purchase, we enable a practical test to make any necessary optimizations and fine-tuning in real-world conditions.

### Implementation

- **Certification:** Upon request, our experienced experts accompany customers towards successful CE certification.
- **Training:** Our service team supports customers with post-purchase setup and employee training (worker training).

### After sales

- **Safety check:** During the annual safety check-up, customers can choose to perform it themselves or enlist our service technicians.
- **Helpdesk:** Throughout the entire product lifecycle, our ErgoMove helpdesk is available to customers for all questions related to the ErgoMove system. Our after-sales team responds promptly to technical queries or system adjustment requests.
- **Repair service:** A comprehensive repair and spare parts service completes our offering, ensuring that an investment in ErgoMove remains profitable and operational for many years.

## Comprehensive accessories for enhanced ergonomics



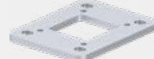
For drive units

- Mechanical enclosures for wheels, motors, and plugs of the drive rollers
- Matching swivel castors
- Spring packages to ensure ground contact of the drive rollers



For control units

- Battery theft protection
- Console extensions / adapter tubes / mounting plates
- External battery boxes



# Series ErgoMove 500



The ErgoMove 500 series stands out for its exceptional compactness and can be seamlessly integrated into even the smallest spaces for loads up to 500 kilograms through plug & play. The adjustable power levels provide optimal driving characteristics for every cart weight.

## Accessories



	Console extension for sensor handle with pre-mounted bracket	Base plate	Double charger	Spare battery	Bracket clamps for the handles	Handle without rotary joystick	Plug protector	Extension cable	ErgoMove 500 Control Center
<b>Article number</b>	EM500-CONSOLE	EM-BASEPLATE	EM-CHARGER-18V2x3A	EM-BATTERY-18V5.2AH	SET EM500-PIPE-CLAMP-35MM	EM-HG-W	SET EM500-PLUG-PROTECTOR	EM500-CABLE-1M	EM500-SOFTWARE-TOOL
<b>Description</b>	Adapter tube for extending the handlebar below the sensor handle, height adjustment 790 mm	For attaching the console extension to a cart frame – additional versions available upon request	For interchangeable batteries, charging voltage 18 V, charging current 2 x 3 A	Original equipment manufacturer quality, 18 V, 5.2 A	Handle brackets for tube mounting, tube diameter 35 mm	As a second handle for the variant handle with rotary joystick (-1FG-R)	Mounting elements for left and right drive rollers when, on the application side, protection of the plugs is not guaranteed	Including plug and socket for the connection between the cockpit and drive wheels, length 1 m	CAN-USB adapter cable and software for the individual configuration, settings, and updates of the ErgoMove 500

Drive wheel adapter plate for applications with a swivel castor with wheel Ø 160 or Ø 200 mm and screw plate 140 x 110 mm:

APS1-APS3-45 – Height adjustment 45 mm

APS1-APS3-85 – Height adjustment 85 mm



**Drive wheel**  
page 13

<b>System load at 5 km/h up to (kg)</b>	500
<b>Wheel-Ø (mm)</b>	140
<b>Wheel width (mm)</b>	50
<b>Total height (mm)</b>	150
<b>Total width (mm)</b>	85
<b>Load capacity of the wheel at 5 km/h (kg)</b>	250
<b>Plate size (mm)</b>	100 x 85
<b>Screw hole distance (mm)</b>	80 x 60
<b>Screw hole diameter (mm)</b>	9



**Handle with rotary joystick**  
(-1FG-R)  
page 9



**Sensor handle with pre-assembled bracket**  
(-SXXXU)  
page 9

Grip length (mm)	SET	
–	SET EM500-ALST 140K-AS-1FG-R	SET EM500-ALST 140K-AS-1FG-R-SAF
515	SET EM500-ALST 140K-AS-S515U	SET EM500-ALST 140K-AS-S515U-SAF
565	SET EM500-ALST 140K-AS-S565U	SET EM500-ALST 140K-AS-S565U-SAF

Other grip lengths available upon request.  
Sensor handle available without pre-mounted bracket upon request.  
Handle also optionally available as left variant.



**Suitable swivel castors**

	Strong pressed steel swivel castor with „stop-fix“ brake	Strong pressed steel swivel castor with „ideal-stop“ brake	Strong pressed steel swivel castor with „stop-fix“ brake, antistatic	Strong pressed steel swivel castor with „ideal-stop“ brake, antistatic
<b>Article number</b>	L-ALST 125K-FI	LK-ALST 100K-3-IS	L-ALST 125K-FI-AS	LK-ALST 100K-3-IS-AS
<b>Total height (mm)</b>	150	147	150	147
<b>Load capacity at 4 km/h (kg)</b>	250	320	250	320
<b>Plate dimensions (mm)</b>	100 x 85	140 x 110 *	100 x 85	140 x 110 *

\* Steel adapter plate APS3-03 for height compensation (3 mm) optionally available.  
Footguard variants available upon request.

# Series ErgoMove 1000



The ErgoMove 1000 series excels in the highest operating comfort and intuitiveness, and can be seamlessly integrated for loads up to 1,000 kilograms in various applications through plug & play. Furthermore, ErgoMove 1000 comes with a comprehensive safety system.

## Accessories



	Console extension	Base plate	Double charger	Spare battery	Extension cable	Battery theft protection, retrofittable	Adapter tube for console extension	Footguard	Motor protection
<b>Article number</b>	EM-CONSOLE EM1000-CONSOLE-SM	EM-BASEPLATE	EM-CHARGER-18V2x3A	EM-BATTERY-18V5.2AH	EM1000-CABLE-2M	EM1000-BATTERY-THEFT-PROTECTION  Variant for -2FG: EM1000-BATTERY-THEFT-PROTECTION-2FG	EM1000-COCKPIT-ADAPTER-2FG	For wheel-Ø 160 mm EM1000-FOOTGUARD-160  For wheel-Ø 190 mm EM1000-FOOTGUARD-190	EM1000-MOTOR-PROTECTION
<b>Description</b>	For Ergonomic-Cockpit with power sensor, height adjustment of 577 mm or 453 mm for the -SM variant	For attaching the console extension to a cart frame – additional versions available upon request	For interchangeable batteries, charging voltage 18 V, charging current 2 x 3 A	Original equipment manufacturer quality, 18 V, 5.2 A	Including plug and socket for the connection between cockpit and drive wheels, length 2 m		For Ergonomic-Cockpit with two rotary joysticks		



Drive wheel  
page 13

With integrated dead man's brake  
up to 4 km/h (EM 1000)

<b>System load at 4 km/h up to (kg)</b>	1,000	1,000
<b>wheel-Ø (mm)</b>	160	190
<b>Wheel width (mm)</b>	50	50
<b>Total height (mm)</b>	202	235
<b>Total width (mm)</b>	213	213
<b>Load capacity of the wheel at 4 km/h (kg)</b>	400	480
<b>Plate size (mm)</b>	140 x 110	140 x 110
<b>Screw hole distance (mm)</b>	105 x 75-80	105 x 75-80
<b>Screw hole diameter (mm)</b>	11	11
<b>Ergonomic-Cockpit with power sensor (-EG)</b> page 10	SET EM1000-POBS 160K-ET-EG	SET EM1000-POBS 190K-ET-EG
<b>Ergonomic-Cockpit with two rotary joysticks (-2FG)</b> page10	SET EM1000-POBS 160K-ET-2FG	SET EM1000-POBS 190K-ET-2FG
<b>Pluggable Ergonomic-Cockpit SWITCH&amp;MOVE with power sensor (-SM)</b> page 10	SET EM1000-POBS 160K-ET-SM (Chassis with plug adapter)	SET EM1000-POBS 190K-ET-SM (Chassis with plug adapter)
	EM-EG-SM (Pluggable cockpit)	EM-EG-SM (Pluggable cockpit)



Suitable swivel castors



	Strong pressed steel swivel castor	Strong pressed steel swivel castor, antistatic	Strong pressed steel double swivel castor	Strong pressed steel double swivel castor, antistatic	Strong pressed steel double swivel castor, optimised swivel resistance
<b>Article number</b>	LH-ALBS 160K	LH-ALST 160K-AS	LHD-ALBS 181K	LHD-ALST 181K-AS	LHD-ALB 181K *
<b>Total height (mm)</b>	202	202	235	235	235
<b>Load capacity at 4 km/h (kg)</b>	580	580	800	800	800
<b>Plate dimensions (mm)</b>	140 x 110	140 x 110	140 x 110	140 x 110	140 x 110

\* Also available as an electrostatically conductive variant, if desired (-ESD).

Footguard variants available upon request.

To ensure electrical conductivity, at least one swivel castor with antistatic / ESD tread must always be used in applications.

# Series ErgoMove 1000T



The ErgoMove 1000T series impresses with the highest operating comfort and intuitiveness, suitable for loads up to 1,000 kilograms in various applications through plug & play. Towing operation is possible up to 10 km/h and is automatically recognised.

## Accessories



	Console extension	Base plate	Double charger	Spare battery	Extension cable	Battery theft protection, retrofittable	Adapter tube for console extension	Footguard	Motor protection
<b>Article number</b>	EM-CONSOLE EM1000-CONSOLE-SM	EM-BASEPLATE	EM-CHARGER-18V2x3A	EM-BATTERY-18V5.2AH	EM1000-CABLE-2M	EM1000-BATTERY-THEFT-PROTECTION  Variant for -2FG: EM1000-BATTERY-THEFT-PROTECTION-2FG	EM1000-COCKPIT-ADAPTER-2FG	EM1000-FOOTGUARD-190-D	EM1000-MOTOR-PROTECTION
<b>Description</b>	For Ergonomic-Cockpit with power sensor, height adjustment of 577 mm or 453 mm for the -SM variant	For attaching the console extension to a cart frame – additional versions available upon request	For interchangeable batteries, charging voltage 18 V, charging current 2 x 3 A	Original equipment manufacturer quality, 18 V, 5.2 A	Including plug and socket for the connection between cockpit and drive wheels, length 2 m		For Ergonomic-Cockpit with two rotary joysticks		



Drive wheel  
page 13

Towable up to 10 km/h (EM 1000T)

System load at 4 km/h up to (kg)	1,000
wheel-Ø (mm)	190
Wheel width (mm)	2 x 50
Total height (mm)	235
Total width (mm)	225
Load capacity of the wheel at 4 km/h (kg)	480
Load capacity of the wheel at 10 km/h (kg)	280
Plate size (mm)	140 x 110
Screw hole distance (mm)	105 x 75-80
Screw hole diameter (mm)	11
 Ergonomic-Cockpit with power sensor (-EG) page 10	SET EM1000T-POBS-D 190K-EG
 Ergonomic-Cockpit with two rotary joysticks (-2FG) page 10	SET EM1000T-POBS-D 190K-2FG
 Pluggable Ergonomic-Cockpit SWITCH&MOVE with power sensor (-SM) page 10	SET EM1000T-POBS-D 190K-SM (Chassis with plug adapter)  EM-EG-T-SM (Pluggable cockpit)

Suitable swivel castors



	Strong pressed steel double swivel castor	Strong pressed steel double swivel castor, antistatic	Strong pressed steel double swivel castor, optimised swivel resistance
Article number	LHD-ALBS 181K	LHD-ALST 181K-AS	LHD-ALB 181K *
Total height (mm)	235	235	235
Load capacity at 4 km/h (kg)	800	800	800
Plate dimensions (mm)	140 x 110	140 x 110	140 x 110

\* Also available as an electrostatically conductive variant, if desired (-ESD).

Footguard variants available upon request.

To ensure electrical conductivity, at least one swivel castor with antistatic / ESD tread must always be used in applications.

# Series ErgoMove 2000P



The ErgoMove 2000P series impresses with the highest operating comfort and intuitiveness, suitable for loads up to 2,000 kilograms in various applications through plug & play. Furthermore, ErgoMove 2000P comes with a comprehensive safety system.

## Accessories






	Console extension	Base plate	Double charger	Spare battery	Extension cable	Battery theft protection, retrofittable	Adapter tube for console extension	Footguard
<b>Article number</b>	EM-CONSOLE EM1000-CONSOLE-SM	EM-BASEPLATE	EM-CHARGER-18V2x3A	EM-BATTERY-18V5.2AH	EM1000-CABLE-2M	EM1000-BATTERY-THEFT-PROTECTION  Variant for -2FG: EM1000-BATTERY-THEFT-PROTECTION-2FG	EM1000-COCKPIT-ADAPTER-2FG	SET EM2000-FOOTGUARD-200
<b>Description</b>	For Ergonomic-Cockpit with power sensor, height adjustment of 577 mm or 453 mm for the -SM variant	For attaching the console extension to a cart frame – additional versions available upon request	For interchangeable batteries, charging voltage 18 V, charging current 2 x 3 A	Original equipment manufacturer quality, 18 V, 5.2 A	Including plug and socket for the connection between cockpit and drive wheels, length 2 m		For ergonomic cockpit with two rotary joysticks	





**Drive wheels**  
page 14

With integrated dead man's brake  
up to 4 km/h (EM 2000P)

<b>System load at 4 km/h up to (kg)</b>	2,000	2,000
<b>Wheel-Ø (mm)</b>	200	200
<b>Wheel width (mm)</b>	50	50
<b>Total height (mm)</b>	245	245
<b>Total width (mm)*</b>	328	223
<b>Load capacity of the wheel at 4 km/h (kg)</b>	700	700
<b>Plate size (mm)</b>	140 x 110	140 x 110
<b>Screw hole distance (mm)</b>	105 x 75-80	105 x 75-80
<b>Screw hole diameter (mm)</b>	11	11
 <b>Ergonomic-Cockpit with power sensor (-EG)</b> page 10	SET EM2000P-GBS 200K-ET-EG	SET EM2000P-GBS 200K-ET-EG-90
 <b>Ergonomic-Cockpit with two rotary joysticks (-2FG)</b> page 10	SET EM2000P-GBS 200K-ET-2FG	SET EM2000P-GBS 200K-ET-2FG-90
 <b>Pluggable Ergonomic-Cockpit SWITCH&amp;MOVE with power sensor (-SM)</b> page 10	SET EM2000P-GBS 200K-ET-SM (Chassis with plug adapter)	SET EM2000P-GBS 200K-ET-SM-90 (Chassis with plug adapter)
	EM-EG-SM (Pluggable cockpit)	EM-EG-SM (Pluggable cockpit)

\* Consider additional installation space of 100 mm for plugs and cables.



**Suitable swivel castors**

	Strong pressed steel double swivel castor	Strong pressed steel double swivel castor, antistatic	Strong pressed steel double swivel castor, optimised swivel resistance
<b>Article number</b>	LHD-ALBS 181K	LHD-ALST 181K-AS	LHD-ALB 181K *
<b>Total height (mm)</b>	235	235	235
<b>Load capacity at 4 km/h (kg)</b>	800	800	800
<b>Plate dimensions (mm)</b>	140 x 110 **	140 x 110 **	140 x 110 **

\* Also available optionally in an electrostatically conductive variant (-ESD).

\*\* Steel adapter plate APS3-10 for drive wheels Ø 200 mm for height compensation (10 mm) optionally available.

Footguard variants available upon request.

To ensure electrical conductivity, at least one swivel castor with antistatic / ESD tread must always be used in applications.

# Series ErgoMove 2000 + 2000T



The ErgoMove 2000 series stands out with the highest safety technology and customizability, suitable for loads up to 2,000 kilograms in various applications. With the EM2000T variant, towing operations are possible up to 16 km/h, allowing for battery charging through the regenerative braking function.

## Accessories



	Charger with Schuko plug	External interchangeable battery box	Adapter for external charging of the interchangeable battery box	Suspended fixed castor bracket for compensating uneven surfaces	Footguard	Bowden cable
<b>Article number</b>	EM-CHARGER-24V6A	EM-BATTERYBOX 0,5M	EM-CHARGING-ADAPTER	upon request	For wheel-Ø 200 mm SET EM2000-FOOT-GUARD-200 For wheel-Ø 250 mm SET EM2000/4000-FOOT-GUARD-252	Upon request
<b>Description</b>	XLR socket (cable length 1.5 m), charging voltage 29 V, charging current 6 A *	With Li-Ion battery and battery connection cable (only usable with a specific control box) *	With battery connection cable	With steel spring, steel welded construction, spring travel 25 mm, also available in stainless steel		For releasing the dead man's brake

\* For the version with an external battery box, the order number "-NOBAT" must be appended.  
Adapter for power cable England / UK - EM-CHARGING-PLUG-UK.



**Drive wheels**  
page 14 + 15

**With integrated dead man's brake  
up to 4 km/h (EM 2000)**

**With integrated dead man's brake,  
towable up to 16 km/h (EM 2000T)**

<b>System load at 4 km/h up to (kg)</b>	2,000	2,000	2,000	2,000
<b>Wheel-Ø (mm)</b>	200	250	200	250
<b>Wheel width (mm)</b>	50	80	50	80
<b>Total height (mm)</b>	245	305	245	305
<b>Total width (mm)</b>	255	270	255	270
<b>Load capacity of the wheel at 4 km/h (kg)</b>	700	1,200	700	1,200
<b>Load capacity of the wheel at 16 km/h (kg)</b>	-	-	280	480
<b>Plate size (mm)</b>	140 x 110	140 x 110	140 x 110	140 x 110
<b>Screw hole distance (mm)</b>	105 x 75-80	105 x 75-80	105 x 75-80	105 x 75-80
<b>Screw hole diameter (mm)</b>	11	11	11	11
<b>Flex-Cockpit 1 handle with rotary joystick 1 handle without rotary joystick (-1FG)</b> page 11	SET EM2000-BS-GBS 200K-ET-1FG	SET EM2000-BS-GBS 252K-ET-1FG	upon request	upon request
<b>Flex-Cockpit 2 handles with rotary joysticks (-2FG)</b> page 11	SET EM2000-BS-GBS 200K-ET-2FG	SET EM2000-BS-GBS 252K-ET-2FG	upon request	upon request



**Suitable swivel castors**



	Strong pressed steel double swivel castor	Strong pressed steel double swivel castor, antistatic	Strong pressed steel double swivel castor, optimised swivel resistance	Welded steel double swivel castor	Welded steel double swivel castor, antistatic
<b>Article number</b>	LHD-ALBS 181K	LHD-ALST 181K-AS	LHD-ALB 181K *	LSD-ALBS 250K-3	LSD-ALST 250K-3-AS
<b>Total height (mm)</b>	235	235	235	305	305
<b>Load capacity at 4 km/h (kg)</b>	800	800	800	1,700	1,700
<b>Plate dimensions (mm)</b>	140 x 110 **	140 x 110 **	140 x 110 **	140 x 110	140 x 110

\* Also available optionally in an electrostatically conductive variant (-ESD).

\*\* Steel adapter plate APS3-10 for drive wheels Ø 200 mm for height compensation (10 mm) optionally available.

Footguard variants available upon request. Matching stainless steel swivel castors available upon request.

To ensure electrical conductivity, at least one swivel castor with antistatic / ESD tread must always be used in applications.

# Series ErgoMove 4000



The ErgoMove 4000 series impresses with extreme robustness and the highest safety technology, suitable for loads up to 4,000 kilograms. Furthermore, the systems are highly customizable to meet individual requirements optimally.

## Accessories



	Charger with Schuko plug	External interchangeable battery box	Adapter for external charging of the interchangeable battery box	Suspended fixed castor bracket for compensating uneven surfaces	Footguard	Bowden cable	Control concept joystick
<b>Article number</b>	EM-CHARGER-24V6A	EM-BATTERYBOX 0,5M	EM-CHARGING-ADAPTER	upon request	SET EM2000/4000-FOOT-GUARD-252	upon request	upon request
<b>Description</b>	XLR socket (cable length 1.5 m), charging voltage 29 V, charging current 6 A *	With Li-Ion battery and battery connection cable (only usable with a specific control box)	With battery connection cable	With steel spring, steel welded construction, spring travel 25 mm, also available in stainless steel		For releasing the dead man's brake *	

\* To release the dead man's brake via the Bowden cable, the variant with emergency release is required. This is available upon request.  
Adapter for power cable England / UK - EM-CHARGING-PLUG-UK.



**Drive wheel**  
page 15

With integrated dead man's brake  
up to 2 km/h (EM 4000)

<b>System load at 2 km/h up to (kg)</b>	4,000
<b>Wheel-Ø (mm)</b>	250
<b>Wheel width (mm)</b>	80
<b>Total height (mm)</b>	305
<b>Total width (mm)</b>	350
<b>Load capacity of the wheel at 2 km/h (kg)</b>	1,200
<b>Plate size (mm)</b>	140 x 110
<b>Screw hole distance (mm)</b>	105 x 75-80
<b>Screw hole diameter (mm)</b>	11
<b>Flex-Cockpit 2 handles with rotary joysticks (-2FG) page 11</b>	upon request
<b>Flex-Cockpit remote control (-RC) page 11</b>	upon request



**Suitable swivel castors**



	Welded steel double swivel castor	Welded steel double swivel castor, antistatic
<b>Article number</b>	LSD-ALBS 250K-3	LSD-ALST 250K-3-AS
<b>Total height (mm)</b>	305	305
<b>Load capacity at 2 km/h (kg)</b>	1,700	1,700
<b>Plate dimensions (mm)</b>	140 x 110	140 x 110

Footguard variants available upon request.

To ensure electrical conductivity, at least one swivel castor with antistatic / ESD tread must always be used in applications.

Matching stainless steel swivel castors available upon request.

# Series ErgoBoost



Unlike the classic ErgoMove with its two load-bearing drive wheels, the ErgoBoost drive system, as a 'fifth-wheel solution', provides a simple starting aid. The integrated suspension ensures a constant ground contact force, thus enabling consistent drive support.



## Accessories

	Double charger	Spare battery	Bracket clamps for the handles	Handle without rotary joystick
<b>Article number</b>	EM-CHARGER-18V2x3A	EM-BATTERY-18V5.2AH	SET EM500-PIPE-CLAMP-35MM	EM-HG-W
<b>Description</b>	For interchangeable batteries, charging voltage 18 V, charging current 2 x 3 A	Original equipment manufacturer quality, 18 V, 5.2 A	Handle brackets for tube mounting, tube diameter 35 mm	


**Drive wheel**  
page 15

**With integrated dead man's brake up to 3 km/h**
**Without integrated dead man's brake up to 3 km/h**

<b>System load at 3 km/h up to (kg)</b>	500	500
<b>Wheel-Ø (mm)</b>	150	150
<b>Wheel width (mm)</b>	50	50
<b>Total width (mm)</b>	223	180
<b>Load capacity of the wheel at 3 km/h (kg)</b>	150	150
<b>Total height (fully sprung) (mm)</b>	175	175
<b>Installation height (mm)</b>	165	165
<b>Total height (max. compressed) (mm)</b>	152	152
<b>Plate size (mm)</b>	140 x 110	140 x 110
<b>Screw hole distance (mm)</b>	105 x 80	105 x 80
<b>Screw hole diameter (mm)</b>	11	11
<b>Handle with rotary joystick (-1FG-R)</b>	upon request	upon request



page 9

Handle also optionally available as left variant.


**Suitable swivel castors**

	Strong pressed steel swivel castor with „stop-fix“ brake	Strong pressed steel swivel castor with „ideal-stop“ brake	Strong pressed steel swivel castor with „stop-fix“ brake, antistatic	Strong pressed steel swivel castor with „ideal-stop“ brake, antistatic
<b>Article number</b>	L-ALST 125K-FI	LK-ALST 100K-3-IS	L-ALST 125K-FI-AS	LK-ALST 100K-3-IS-AS
<b>Total height (mm)</b>	150	147	150	147
<b>Load capacity at 3 km/h (kg)</b>	250	320	250	320
<b>Plate dimensions (mm)</b>	100 x 85	140 x 110 *	100 x 85	140 x 110 *

\* To suit specific applications, swivel castors are available in additional height variations, along with adapter plates for height adjustment. Footguard variants available upon request.

To ensure electrical conductivity, at least one swivel castor with antistatic / ESD tread must always be used in applications.

CUSTOMIZING

# Customised solutions.

Individuality is a top priority.

Every logistical challenge is different. Therefore, we conduct an initial analysis of the current situation with each customer before collaboratively developing a tailor-made solution concept that fits their needs. The ErgoMove team is available for support both during and after the system's implementation. ErgoMove thus enables a holistic and sustainable solution to logistical challenges in an ergonomic, efficient, and safe manner.

Our goal: Moving everything. Anywhere.





## This is how we understand individuality

### Custom ErgoMove software configurations

By customizing the ErgoMove software, specific operating and driving modes such as speed, starting, and braking behaviour can be individually adjusted.

### Special environmental conditions

For wet or outdoor use, special surface coatings or rust-free materials are used. IP protection classes can also be adapted to ensure product longevity even in challenging conditions.

### Difficult ground conditions

Uneven ground can negatively affect the stability and traction of the driven wheels. Special spring units as accessories provide a solution for safe driving behavior.

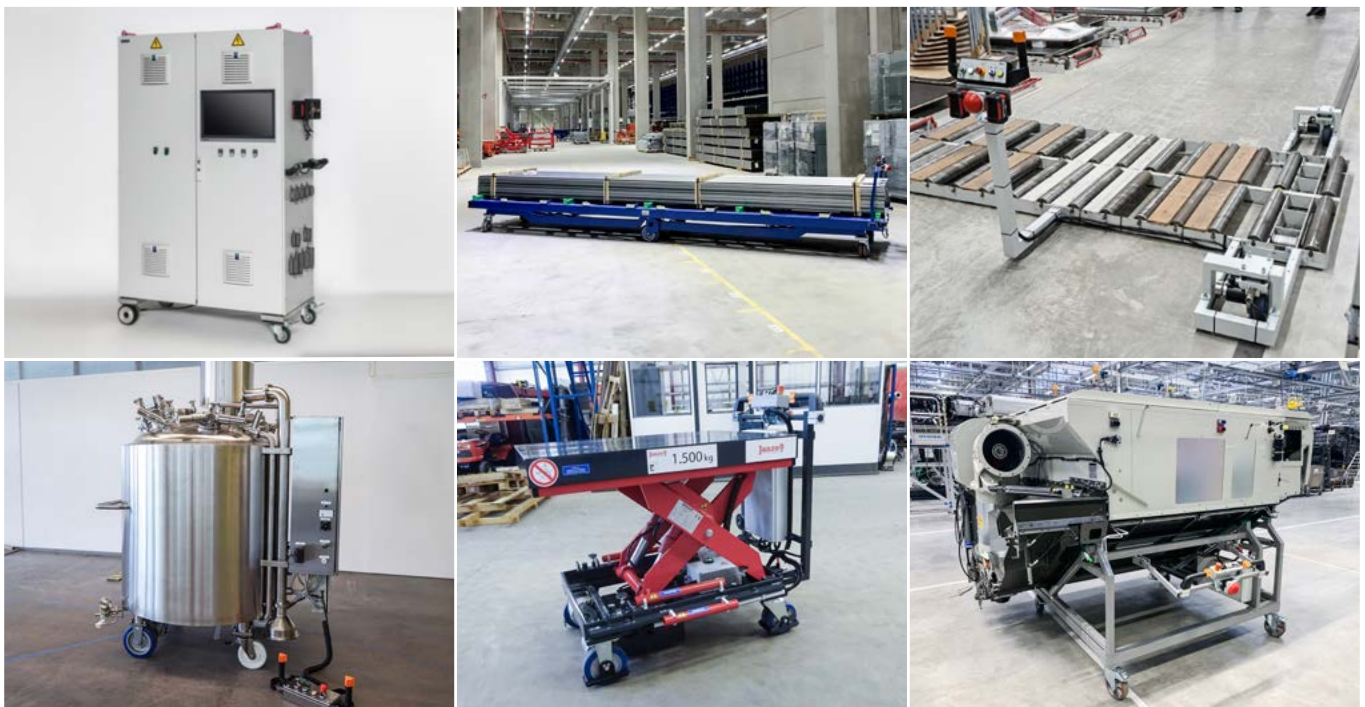
### System integrations

Electric machines and systems often require electric drive systems to be integrated and networked. ErgoMove is ready for integration. It can be operated with existing power sources or ErgoMove batteries can be used for other peripheral devices.

### Special chassis requirements

A well-tuned chassis of driven fixed castors and swivel castors is the basis of every ErgoMove solution. Thanks to the nearly limitless variety of Blicke wheels and rollers, the right products can be found for all additional requirements – such as improved traction, noise reduction, electrical conductivity, or wheels for rail operation.

## The concept: thoughtful. The reality: perfect!



A STRONG PARTNER

# ErgoMove. With the expertise of Blickle.

Safety from the world market leader.

The ErgoMove Business Unit has specialised comprehensively in electrically powered wheel solutions within the Blickle Group. The in-house development and production facilitate the swift implementation of high-quality solutions. Additionally, the sales and dedicated service unit ensure optimal customer service.





**INNOVATION AWARD FOR  
ERGONOMICS 2021**



ErgoMove is a division of the Blickle Group, headquartered in Rosenfeld in southern Germany, drawing upon over 70 years of experience and expertise in the field of mobility solutions. Today, the ErgoMove Business Unit is a specialist in the development, production, and implementation of innovative e-mobility solutions across various industries. The high Blickle standard of quality, Made in Germany, flexibility, and reliability is evident in every ErgoMove solution.



**ERGOMOVE**  
moving everything. anywhere.

**Blickle**  
we innovate mobility

**At a glance:**

- Over 1,300 employees worldwide
- World market leader among manufacturers of wheels and castors
- Standard range of 30,000 types of wheels and castors
- 20 proprietary sales subsidiaries in Europe, North America, Asia, and Australia
- Representative offices and sales partners in over 120 countries worldwide
- Certified according to DIN EN ISO 9001, DIN EN ISO 14001, DIN EN ISO 50001 and DIN ISO 45001
- Over 70 years of experience and expertise in the field of mobility solutions
- Made in Germany





## ErgoMove – The system

control concepts,  
drive concepts and  
options.



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# Schedule your demonstration now!

Experience the diverse and individual world of ErgoMove. Customised solutions for loads of up to four tons are achievable with the e-mobility solutions of the ErgoMove brand.

For further information, please contact your ErgoMove specialists:  
E-mail [ergomove@blickle.com](mailto:ergomove@blickle.com)