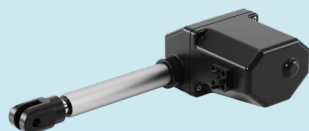
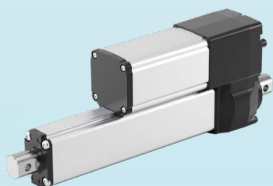




PHOENIX MECANO

PHOENIX MECANO LINEAR SOLUTIONS

WE MOVE YOUR IDEAS FORWARD



- **LINEAR DRIVES FOR EXTREME OPERATING CONDITIONS**
- **POWERFUL AND ROBUST IN A VERY COMPACT DESIGN**
- **CUSTOMER-ORIENTED AND FAST SERVICE WORLDWIDE**

WIDE RANGE OF APPLICATIONS

FROM AGRICULTURE TO INDUSTRY

Whatever your business sector or environmental surroundings are, Phoenix Mecano has the right linear drives for every application: including industrial and logistics applications, agricultural machinery, mobile and off-highway, as well as offshore and marine applications.

Phoenix Mecano's linear drive technology is powerful, reliable, easy to install, and it can be integrated into new or existing constructions. With intelligent built-in features – including synchronization, high-precision positioning and a communication system – our electric cylinders are the perfect solution for moving things efficiently.



Offshore- and marine technology



LD75



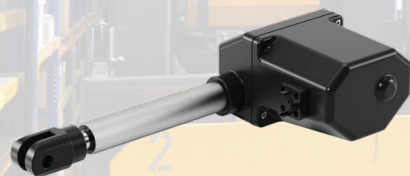
Mobile and off-highway



BGR 010



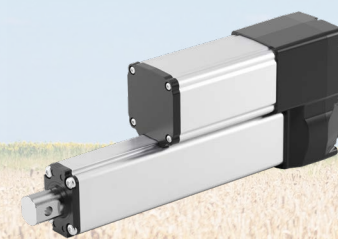
Industrial and logistics



LAMBDA



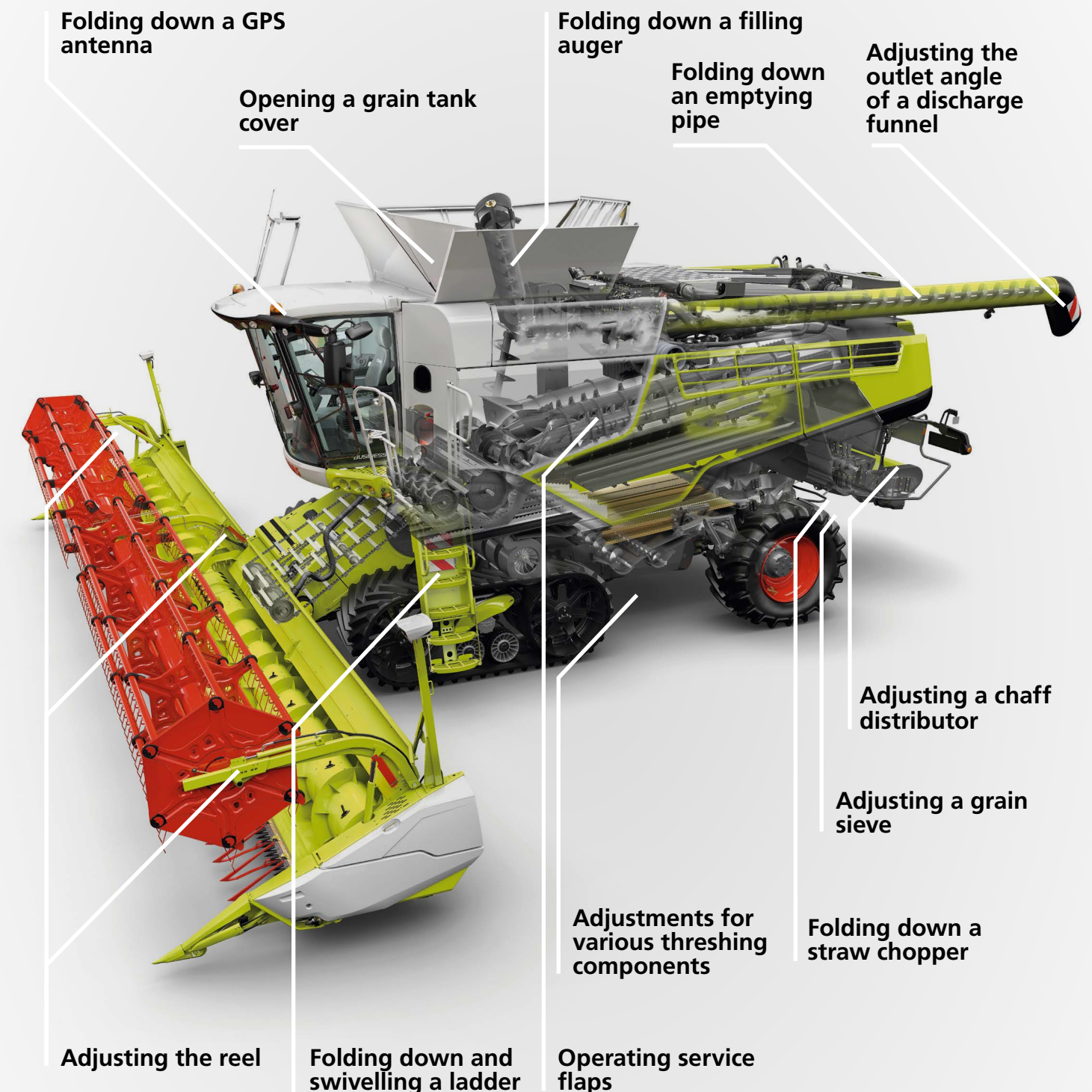
Agricultural machinery



LD1000

SELF PROPELLING HARVESTING MACHINES

APPLICATION EXAMPLES



Agricultural machinery

During the harvest season, farmers must rely on the performance of their machinery in all weather conditions. Reliable drives that can withstand extreme conditions play a key role in increasing productivity. Phoenix Mecano's linear drives are designed for a wide range of harvester applications – including sieve adjustments and folding down GPS antennas.

LD1000



LD75



LAMBDA



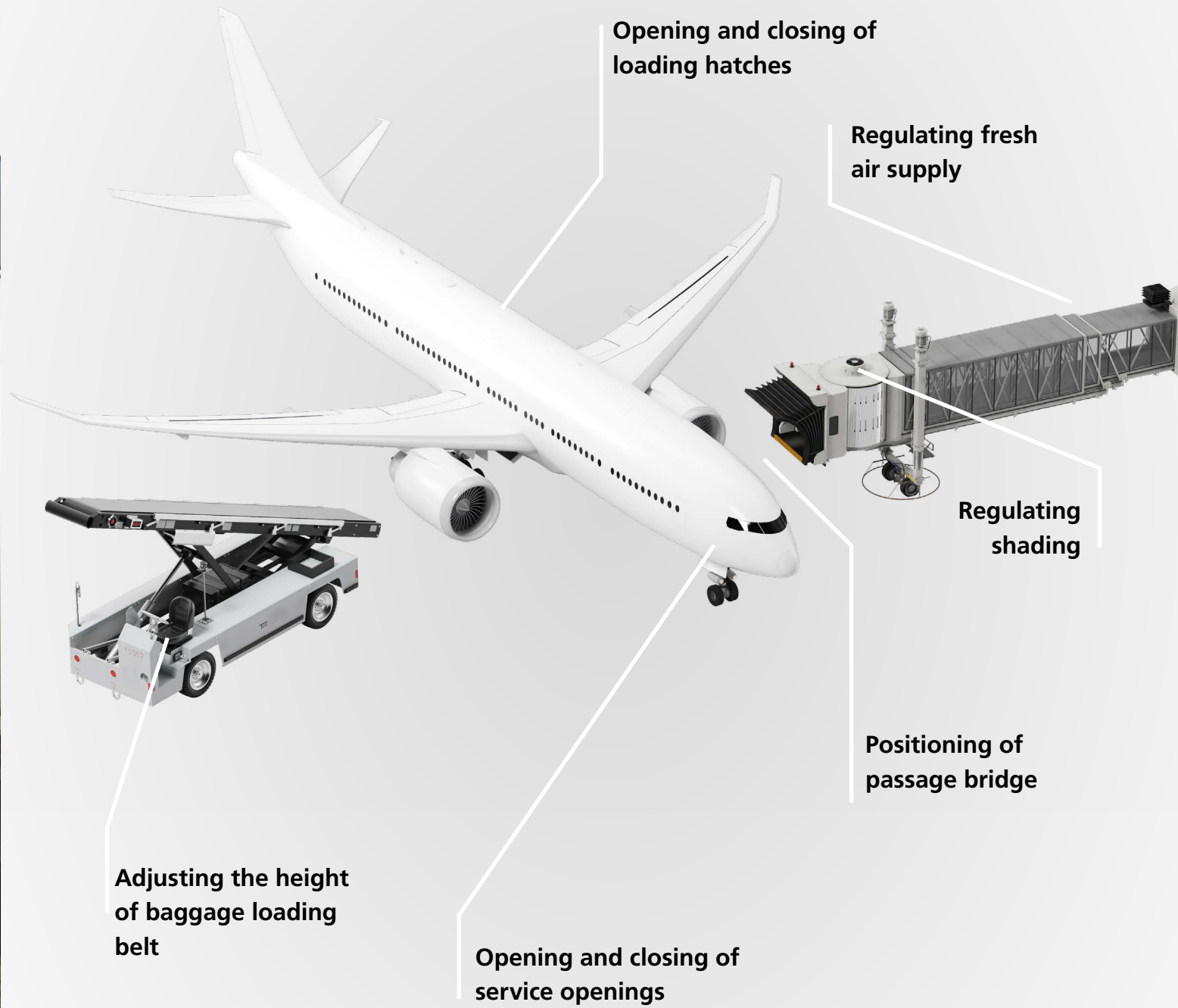
BGR 010





MOBILE & OFF-HIGHWAY

APPLICATION EXAMPLES



Mobile and Off-Highway

Modern processing and transport machines must withstand adverse conditions. Robust construction is necessary to ensure productive and long-lasting operations. This is particularly true for the drives installed in these machines. When using electric cylinders from Phoenix Mecano, users are always on the safe side. Our efficient solutions always work reliably, are extremely resistant to environmental conditions, and can be used flexibly – whether they are for construction machinery, rescue vehicles or lifting systems.

LD1000



LD75



LAMBDA



BGR 015



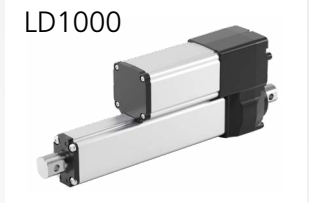
OFFSHORE- AND MARINE TECHNOLOGY

APPLICATION EXAMPLES



Offshore and marine technology

High IP protection, robust construction and high forces: these characteristics of Phoenix Mecano products make them ideal for use in marine and offshore applications. Our linear drives can be used flexibly in sailboats, yachts, container ships and cruise liners. The application possibilities include many functions – such as controlling bathing platforms or opening and closing all types of windows and roof hatches.





INDUSTRIAL AND LOGISTICS

APPLICATION EXAMPLES

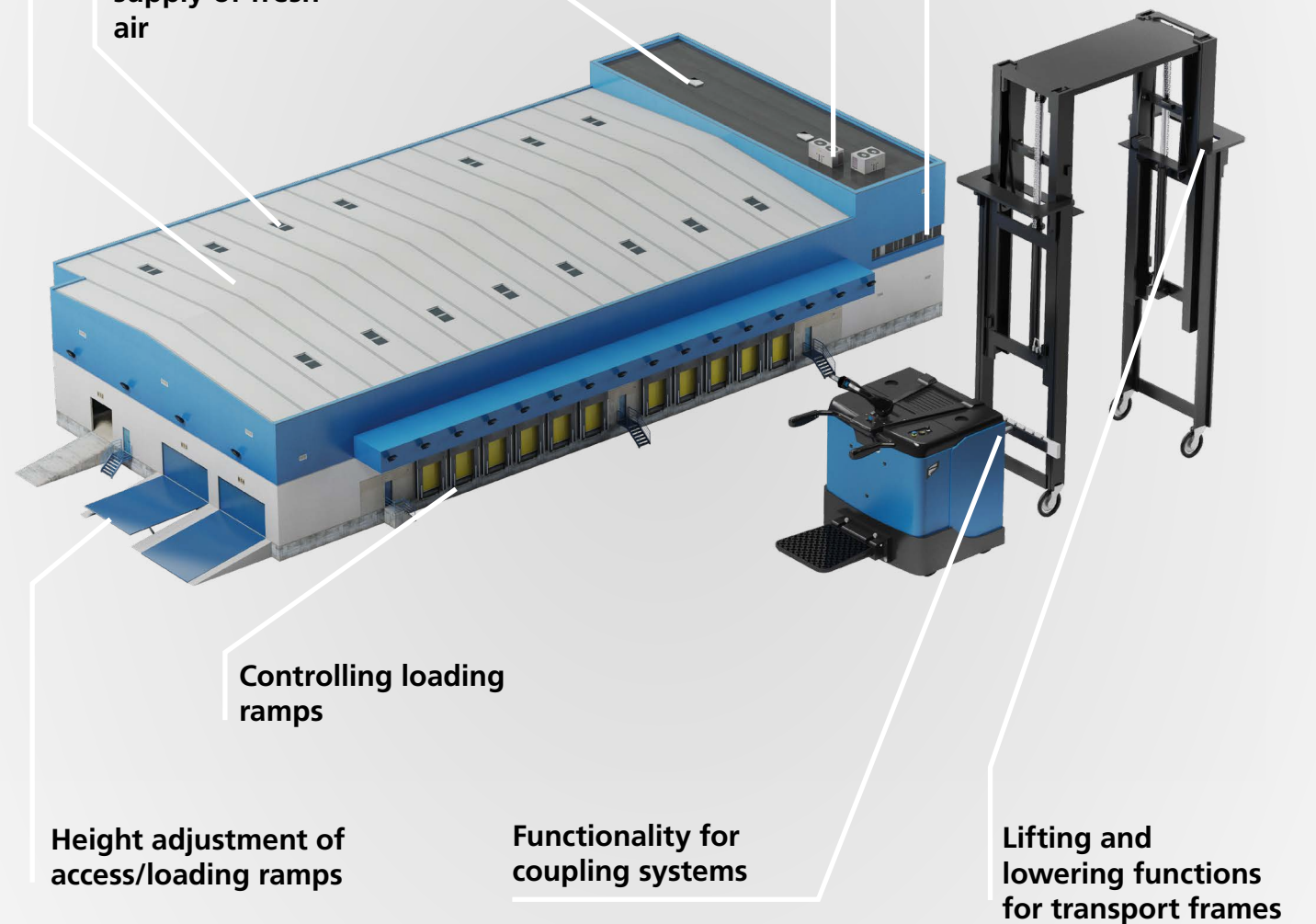
Controlling shading systems

Controlling of building ventilation system

Opening and closing of exhaust air vents

Building management: opening/closing windows

Controlling the supply of fresh air



Industrial and logistics

Production facilities and logistics centres require improved efficiency and reliability. Phoenix Mecano's modern drive solutions are the ideal response to the more demanding requirements from these logistics and industrial sectors. Our intelligent linear drives are already being used today for communications within various machines. For industrial trucks, for example, they ensure that the material carriers are lowered accurately and precisely.

LD1000



LD75



LAMBDA



BGR 015



LINEAR ACTUATORS

DYNAMIC AND RELIABLE

LD75



Force	Max. 750 N
Adjustment speed	Max. 50 mm/s*
Stroke length	Min. 20 mm, max. 130 mm
Motor voltage	Maintenance-free 12V & 24V DC motors
Housing material	Die-cast aluminium
Protection class	Max. IP69K (static)
Options	Potentiometer

LINEAR ACTUATORS

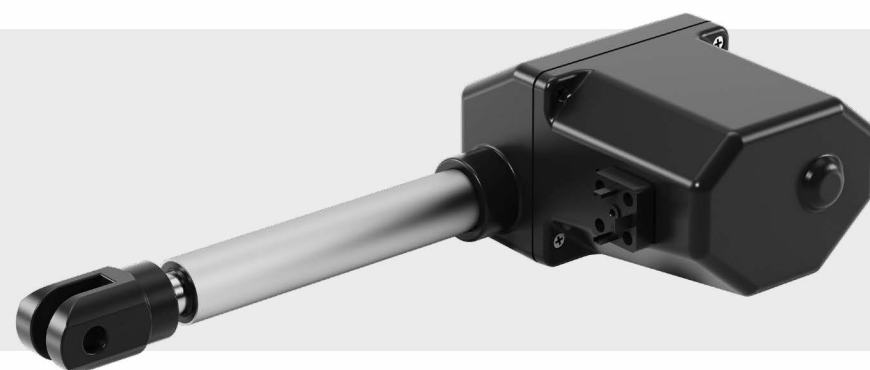
COMPACT AND ROBUST

BGR 015



Force	Max. 1000 N
Adjustment speed	Max. 100 mm/s*
Stroke length	Min. 15 mm, max. 300 mm
Motor voltage	Maintenance-free 12V & 24V DC motors
Housing material	POM, anodized aluminium profile
Protection class	IP54 (static)
Options	Potentiometer, end position feedback

LAMBDA



Force	Max. 6,000 N
Adjustment speed	Max. 38 mm/s*
Stroke length	Min. 15 mm, max. 600 mm
Motor voltage	Maintenance-free 12V & 24V DC motors
Housing material	POM
Protection class	IP66 (static)
Options	Potentiometer, end position feedback

BGR 010



Force	Max. 500 N
Adjustment speed	Max. 38 mm/s*
Stroke length	Min. 30 mm, max. 100 mm / min. 1 mm, max. 70 mm
Motor voltage	Maintenance-free 12V & 24V DC motors
Housing material	Die-cast aluminium, anodized aluminium pipe
Protection class	IP54 or IP40 (static)
Options	Potentiometer, end position feedback

* Depending on the drive configuration

* Depending on the drive configuration

LINEAR ACTUATORS

POWERFUL AND INTELLIGENT

LD1000E & LD1000C

VARIANTE OVERVIEW



LD1000E

Force	Max. 10,000 N
Adjustment speed	Max. 130 mm/s*
Stroke length	Min. 15 mm, max. 1,000 mm
Motor voltage	12VDC, 24VDC
Housing material	Die-cast aluminium, anodized aluminium profile
Protection class	IP69K (static)
Options	End position feedback



LD1000C

Force	Max. 10,000 N
Adjustment speed	Max. 156 mm/s*
Stroke length	Min. 15 mm, max. 1,000 mm
Motor voltage	12VDC, 24VDC
Housing material	Die-cast aluminium, anodized aluminium profile
Protection class	IP69K (static)
Options	Power switch-off, blocking switch-off, temperature monitoring

* Depending on the drive configuration

	LD1000E	LD1000C
Control / regulating functions		
Speed regulating	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Configurable speed	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Programmable start/stop ramps	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Customer software	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Can be controlled digitally	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Direction of movement can be selected by reversing the polarity of the supply voltage	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Synchronous drive movement	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Feedback		
Absolute displacement measuring system	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Detection of end position	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
End-position feedback potential bound	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
End-position feedback potential-free	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Analogue position feedback	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Position signal query	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Communication interface	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Monitoring functions		
Current limiting	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Current regulating	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Power shut-down	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Blocking shut-down	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Temperature monitoring	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Additional features		
Customizable hanging mechanisms	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Special strokes can be set at factory	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Special strokes can be set by customer (with software)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Self-locking up to the rated load	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
High protection class (IP69K)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Overload coupling	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Available Not available

INTEGRATED INTELLIGENCE

INTELLIGENT LINEAR DRIVES BY PHOENIX MECANO

Linear drives with an integrated control unit such as the LD1000C allow maximum flexibility, functionality and digital communication: the components can be programmed, configured or updated via CAN interfaces. No additional control electronics or complex circuitry is required, making the intelligent drive particularly suitable for controlling highly digitalized vehicles, machines and production plants.

Thanks to integrated intelligence, our smart drives allow quick and wireless configuration of drive parameters such as stroke, speed and travel profile, as well as monitoring and control of the system. Synchronous operation with up to eight drives is possible without any problems. The extended input voltage range allows direct control by single-board computers.

Customer benefits:

- Position detection and temperature monitoring
- Synchronous operation with up to eight drives
- Easy programming via user interface
- Feedback of operating voltage
- Reading of motor current
- Create driving profiles



TAILOR-MADE SYSTEM SOLUTIONS



EVERYTHING FROM A SINGLE SOURCE

Not only does Phoenix Mecano provide modern and versatile linear drives for a wide variety of applications. We also offer complete system solutions that are optimally tailored to the individual requirements and wishes of our customers. In addition to high-performance drive technology, we supply the corresponding housings, monitor mounts and input systems for a wide range of applications. This means that our customers receive everything from a single source. We also deliver products in special colours, customer-specific samples and custom configurations.

EASY PLUG & PLAY

The great advantage with our products: Our systems and all the components they contain are easy and straightforward to assemble and put into operation – there is no complex installation or configuration required. They are designed as Plug & Play: both the software and hardware support the identification and connection of new devices without any need to configure them individually. This means that your system can be expanded or modified independently as needed.

PHOENIX MECANO SERVICE & CONSULTING

COMPETENT SUPPORT RIGHT FROM THE START

Phoenix Mecano's expert service staff are always on hand to help customers with any questions or technical challenges they may have – whether it involves consulting, or the development and implementation of their drive solution. We are happy to design customized samples together with our customers, deliver products in special colours, and accompany projects from the prototype phase all the way to production.

Many years of expertise

Thanks to our decades of expertise, we know exactly what kind of electric cylinders and system technology are required for the agricultural and off-highway sectors. This enables us to provide

our customers with the best advice possible. Take advantage of our expertise and personal service to find the optimal solution for every challenge.

Speed, versatility and customer proximity

Phoenix Mecano Komponenten AG, headquartered in the Swiss municipality of Stein am Rhein, has a global presence: the company employs more than 7000 people at over 60 locations. This worldwide network of branches enables us to be close to our customers continually. Our experienced specialists are available for you at all times by e-mail, telephone, virtually or on-site.

OUTSTANDING VERSATILITY

AN OVERVIEW OF APPLICATIONS FOR ELECTRIC CYLINDERS

- Agricultural technology (in machinery and equipment)
- Mobile off-highway (construction machinery and transport)
- Machinery construction (machinery, vehicle and facility construction)
- Automation technology (production facilities and logistics)
- Industrial automation (manufacturing facilities and systems)
- Agricultural buildings (for storage and selection)
- Lawn and golf course maintenance (mowing and maintenance technology)
- Forest technology (machinery and equipment)
- Municipal technology (cleaning)
- Agricultural automation and robotics
- Special crop technology (fruit and vegetable crops)
- Agricultural refinement (mills & mixed farms)
- Animal husbandry (stable and feeding technology)

SERVICE & SALES

DEVELOPMENT & PRODUCTION SITE



Switzerland





PHOENIX MECANO

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