

# SEATING SYSTEMS



A DewertOkin Technology Brand



- GLOBAL LEADER OF SEATING ACTUATOR SYSTEMS
- DESIGNED AND ENGINEERED IN GERMANY
- PRODUCTS MANUFACTURED IN EUROPE
- INNOVATIVE ACTUATORS, CONTROL UNITS AND ACCESSORIES

# SYSTEM SOLUTIONS FOR SEATING APPLICATIONS

# OKIN PRODUCT OVERVIEW

Adjustable armchairs with motorized back and foot sections are currently quite popular: Reclining television armchairs and other reclining seating are expected to be very comfortable. Stand-up chairs, which are particularly relevant for seniors, have a motorized adjustable stand-up assistance feature, which helps to promote mobility. Modern motorized armchairs are being configured with more special features, such as Bluetooth or memory functionality, that provide real benefits for their users.

OKIN is a specialist in actuator and system technology for motorized armchairs, with more than 20 years of experience in the seating industry. We not only manufacture components such as actuators, control units and control keypads, but also design and implement tailor-made customized projects. In the joint planning phase, we custom-design the entire system and program the required functional sequences to match the customer's requirements. Our customers also benefit from our speedy delivery times and global sales network that is able to help them with any service issues.

## Compact actuators for adjustable armchairs

The elegant design of many modern adjustable armchairs leaves little room for electrical components. That is why OKIN actuators have a very compact construction. With their minimal

installation dimensions, they enable a large lifting stroke even in confined spaces. The actuators operate with a pushing force of up to 6,000 N compressive force – thus, despite their compact design, they are suitable for a wide range of applications and heavy-duty tasks. They also feature outstanding reliability and a gentle adjustment mechanism for the height, back or foot section.

## Control units and control keypads: a wide range of functions for adjustable armchairs

Intelligent control units are essential for implementing customized motion profiles and extended functionality. The HE150 control unit is capable of connecting with up to four OKIN actuators, a massage function and two built-in floor lights. The patented brush-sparking evaluation function makes it possible to save customized memory positions for OKIN actuators without Hall sensors. The built-in bi-directional 2.4 GHz radio control enables wireless operations for all functions thanks to our patented, interference-free wireless transmissions. We have a wide selection of matching wireless hand-held transmitters for adjustable armchairs and many optional components (USB chargers, etc.).

The HE150 and many other OKIN control units have built-in Bluetooth so that the motorized armchairs can be operated using mobile devices.

## 1. Single actuators for seating applications



## 2. Chair Controls for all single actuators



## 3. Handsets wired and wireless for OKIN RF-control units



## 4. OKIN apps for mobile control



## 5. Controls units for seating applications



## 6. Power Supply



# ALPHADRIVE 3

FOR RECLINER CHAIRS

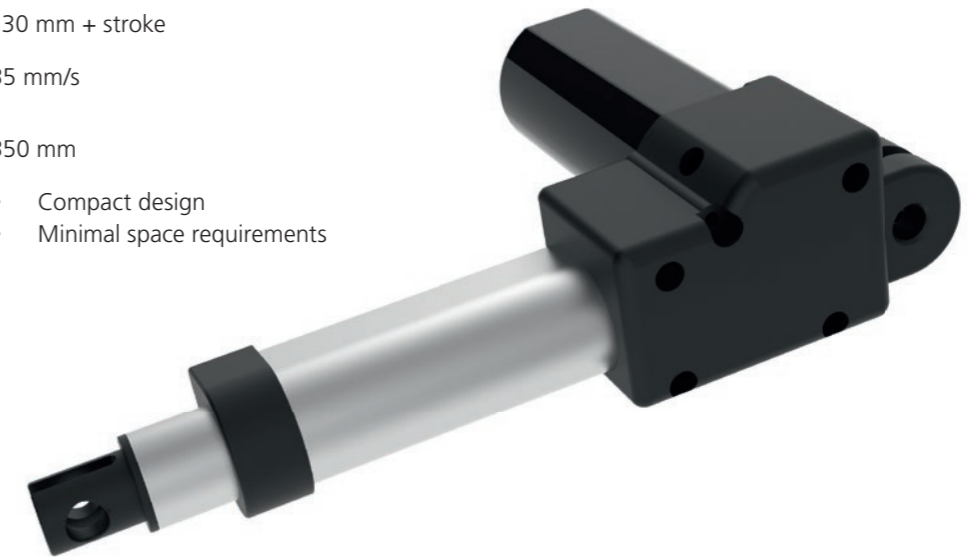
<b>Load capacity (max.)</b>	3,000 N
<b>Motor voltage</b>	Maintenance-free 24 V DC motors
<b>Fitting dimensions (min.)</b>	141 mm + stroke
<b>Adjustment speed (max., unloaded)</b>	30 mm/s
<b>Stroke length (max.)</b>	350 mm
<b>Features</b>	<ul style="list-style-type: none"><li>Extremely small motor housing</li><li>Adjustable gear clevis (45°, 90°, 135°)</li></ul>



# MICRODRIVE 2

FOR RECLINER CHAIRS

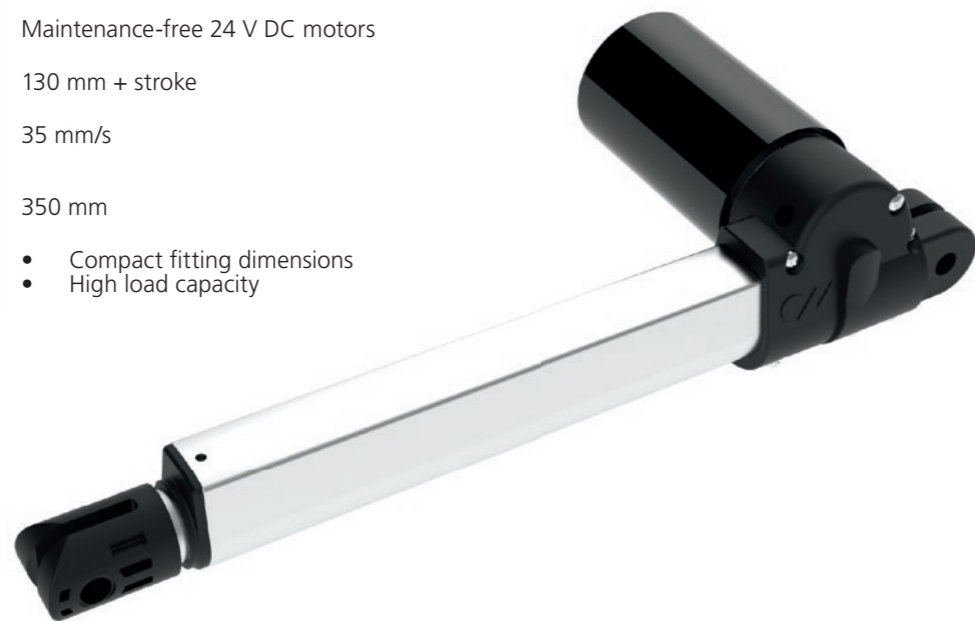
<b>Load capacity (max.)</b>	3,000 N
<b>Motor voltage</b>	Maintenance-free 24 V DC motors
<b>Fitting dimensions (min.)</b>	130 mm + stroke
<b>Adjustment speed (max., unloaded)</b>	35 mm/s
<b>Stroke length (max.)</b>	350 mm
<b>Features</b>	<ul style="list-style-type: none"><li>Compact design</li><li>Minimal space requirements</li></ul>



# ALPHADRIVE 5

FOR LIFTER CHAIRS

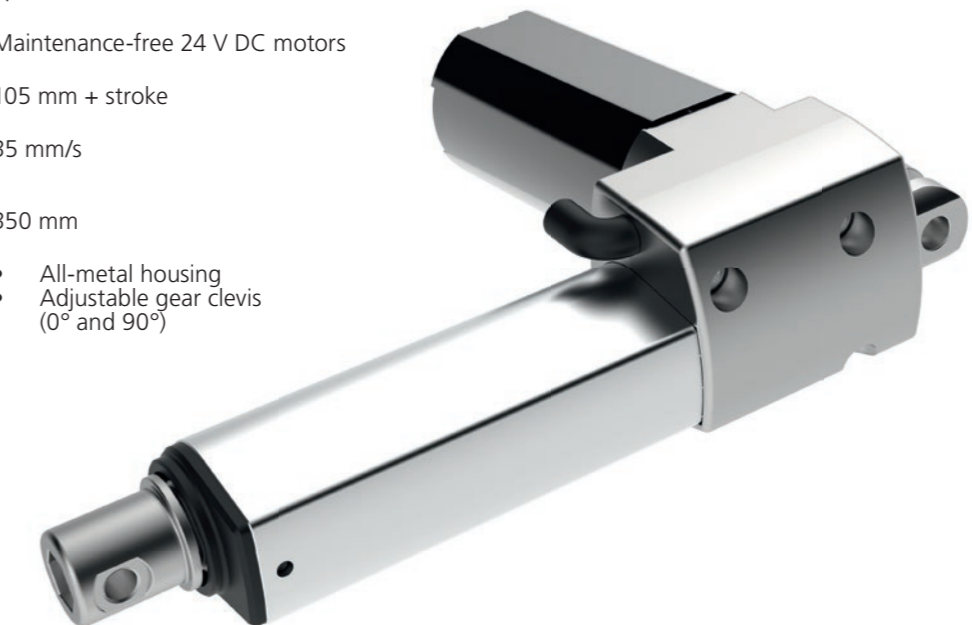
<b>Load capacity (max.)</b>	6,000 N
<b>Motor voltage</b>	Maintenance-free 24 V DC motors
<b>Fitting dimensions (min.)</b>	130 mm + stroke
<b>Adjustment speed (max., unloaded)</b>	35 mm/s
<b>Stroke length (max.)</b>	350 mm
<b>Features</b>	<ul style="list-style-type: none"><li>Compact fitting dimensions</li><li>High load capacity</li></ul>



# MICRODRIVE 3

FOR RECLINER CHAIRS

<b>Load capacity (max.)</b>	4,000 N
<b>Motor voltage</b>	Maintenance-free 24 V DC motors
<b>Fitting dimensions (min.)</b>	105 mm + stroke
<b>Adjustment speed (max., unloaded)</b>	35 mm/s
<b>Stroke length (max.)</b>	350 mm
<b>Features</b>	<ul style="list-style-type: none"><li>All-metal housing</li><li>Adjustable gear clevis (0° and 90°)</li></ul>



# ECO BETADRIVE

## FOR RECLINER CHAIRS

Our OKIN Eco Betadrive provides chair manufacturers with a single actuator featuring very high adjustment speed of over 40 mm/sec. This enables users of motor-adjustable armchairs to comfortably reach their desired sitting position as quickly as possible. Manufacturers of comfort armchairs also benefit from the low weight of the single actuator, which reduces the overall weight of their end products, making installation much easier. Another special feature of the Eco Betadrive is its ability to connect directly to different control keypads, so there is no need for a controller.

<b>Load capacity (max.)</b>	1.500 N
<b>Motor voltage</b>	Maintenance-free 24 V DC motors
<b>Fitting dimensions (min.)</b>	156 mm
<b>Adjustment speed (max., unloaded)</b>	44 mm/s
<b>Stroke length (max.)</b>	500 mm
<b>Features</b>	<ul style="list-style-type: none"><li>• High-adjustment speed</li><li>• Low weight</li></ul>



# HANDSETS – WIRED

## FOR ALL SEATING ACTUATORS

Tried and tested easy-to-use handsets with a wired connection. OKIN wired handsets have a robust housing and are designed for high reliability and precise inputs. Equipped with a reset function, the opline handsets can be used for controlling both movements at the same time. Furthermore, both handsets are equipped with a hook on the back side.



<b>Control Unit</b>	Direct control
<b>Color</b>	Black
<b>Buttons</b>	2 - 6
<b>No. of actuators</b>	For 1 or 2 actuators incl. reset function
<b>Protection type</b>	IP20

# CHAIR CONTROLS

FOR ALL SEATING ACTUATORS

Elegant built-in controls for seating applications: The rounded corners of the screwless housings give the OKIN controls a premium look that adapts to the design of the furniture. Thanks to the stable processing of the housings, high reliability and quality is ensured. Due to their compact design, the controls are space-saving and can be used flexibly. The built-in controls also feature a USB charger that can be used to conveniently charge connected devices such as smartphones or tablets.



Chair Control Mira



Chair Control SeeSaw



Chair Control MP

	Chair Control Mira	Chair Control SeeSaw	Chair Control MP
<b>Control Unit</b>	Direct control	Direct control	Direct control
<b>Color</b>	Black (buttons: metal)	Black	Metal housing
<b>Buttons</b>	2 - 4	4 (2 rocker switches)	2 - 4
<b>Protection type</b>	IP20	IP20	IP20
<b>Built-in USB charger</b>	Yes	Yes	Yes

# HANDSETS – WIRELESS

COMPATIBLE WITH OKIN RF RECEIVERS

OKIN RF handsets stand out in particular for their elegant design: The screwless housing is appealing and flat, ensuring an optimal handling at all times. Thanks to their responsive buttons and high value housing surfaces, the handsets are ideal for seating applications. Equipped with the OKIN bi-directional 2.4 GHz radio control, the input of commands is always accurate and reliable.



RF Eco+



RF Eco



RF Touch

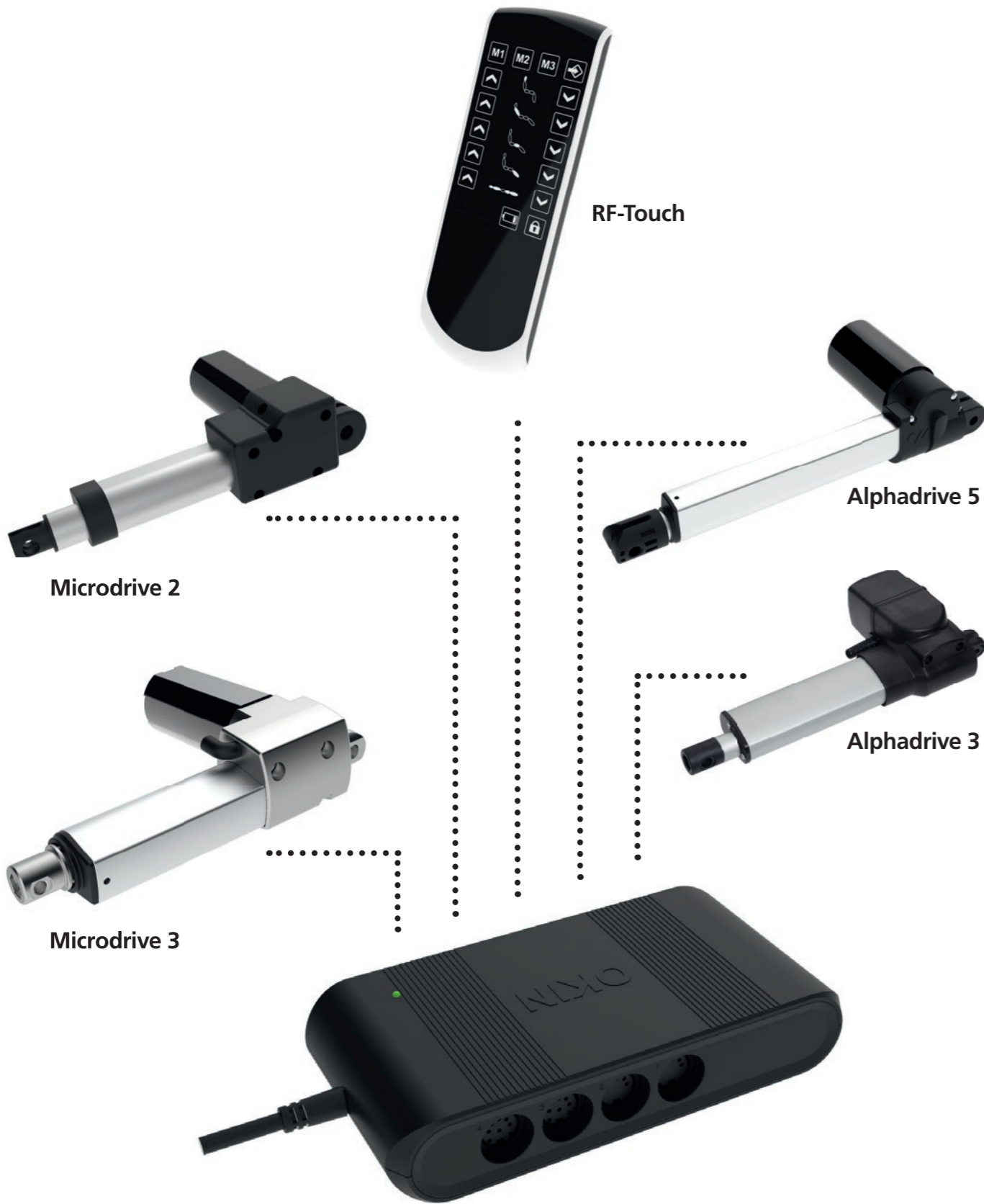
<b>Connection</b>	RF technology 2.4 GHz Bidirectional
<b>Protection type</b>	IP20
<b>Compatibility</b>	Combinable with all OKIN seating systems
<b>Option</b>	Customizable buttons Customer-specific printings
<b>Certification</b>	RED

# SYSTEM EXAMPLE MODULAR

CU165 WITH SINGLE ACTUATORS

# OKIN-APPS

MOBILE CONTROL



Comfortable operation of adjustable recliner chairs via smartphone or tablet. OKIN apps are designed to work in perfect sync with seating applications. They are easy to install and use. Our apps reflect more functions compared to the RF handset and offer a new way of operation. OKIN offers standard iOS and Android Apps as well as customized versions for individual requirements.



# CU155+

## CONTROL UNIT

<b>Connection</b>	Integrated 2.4 GHz RF receiver Bidirectional, interference-free Integrated Bluetooth® receiver
<b>No. of actuators</b>	Up to 4 actuators
<b>Mounting options</b>	Mounting plate
<b>Safety</b>	Overload current switch-off
<b>Connecting cable</b>	Attached supply cable
<b>Features</b>	<ul style="list-style-type: none"><li>• Can be combined with OKIN Powerpack</li><li>• Can be combined with all OKIN wireless handsets (2.4 GHz bidirectional)</li></ul>



# CU165

## CONTROL UNIT

<b>Connection</b>	Integrated 2.4 GHz RF receiver Bidirectional, interference-free Integrated Bluetooth® receiver
<b>No. of actuators</b>	Up to 4 actuators (with hall sensors and PWM-control)
<b>Mounting options</b>	Mounting plate
<b>Safety</b>	Overload current switch-off
<b>Connecting cable</b>	Attached supply cable
<b>Features</b>	<ul style="list-style-type: none"><li>• Customized programming</li><li>• Can be combined with OKIN Powerpack</li><li>• Can be combined with all OKIN wireless handsets (2.4 GHz bidirectional)</li></ul>



# ACCESSORIES

## EXTERNAL POWER SUPPLY

The external OKIN power supplies PD21 and PD22 combine space-saving design with high performance. They can be combined with all OKIN actuators and are therefore ideal for a wide range of seating applications. Thanks to the electronic switching power supply technology (SMPS), the external power supplies have a higher efficiency, are lighter and more compact. The external power supplies provide a constant output voltage independent of the input voltage. They also feature very low standby power consumption, comply with energy efficiency class VI and comply with the Ecodesign Directive 2009/125/EC.



PD21



PD22

<b>Control</b>	SMPS
<b>Power supply</b>	Wide input voltage range 100-240 V/AC
<b>Output voltage</b>	29 V DC constant voltage output
<b>Connecting cable</b>	Pluggable
<b>Indicators</b>	LED operating status indication (green)
<b>Safety</b>	<ul style="list-style-type: none"><li>• NTC temperature sensor</li><li>• Primary fuse</li><li>• Overload protection</li><li>• Overcurrent switch-off</li><li>• Short-circuit-proof output</li></ul>

# BATTERY POWER PACK 1800

FOR ALL OKIN CONTROL UNITS

The compact PP1800 with an internal charging board enables the mains-independent power supply for electrically adjustable seating furniture. The Li-Ion rechargeable battery also allows OKIN actuator systems to be charged and operated simultaneously. An LED charge status indicator and an acoustic warning signal for low residual charge provide reliable information on the status of the power pack. In addition, the PP1800 has numerous safety features such as electronic overload cut-off and deep discharge protection.



<b>Output voltage</b>	29 V DC
<b>Battery type</b>	Lithium-ion
<b>Capacity</b>	1800 mAh
<b>Housing color</b>	Black RAL 9005
<b>Protection type</b>	IP20
<b>Safety</b>	<ul style="list-style-type: none"><li>• Overheating protection</li><li>• Overload protection</li><li>• Overcurrent disconnection</li><li>• Short-circuit proof</li><li>• Deep discharge protection</li></ul>



## DEWERTOKIN TECHNOLOGY GROUP CO., LTD

DewertOkin Technology Group Co., Ltd is located at Wang JiangJing Economic zone, JiaXing Zhejiang, China, which is an active area for business in the Yangtze River Delta. We maintain the brands OKIN and Dewert for the linear drives. They are widely used in smart furniture (such as motion upholstery, massage chairs, theatre seating, recliners and adjustable beds), medical applications (such as medical and nursing beds) and adjustable office desk control systems. We are a main partner for several major furniture factories. Our goal is to provide complete smart furniture solutions worldwide.



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