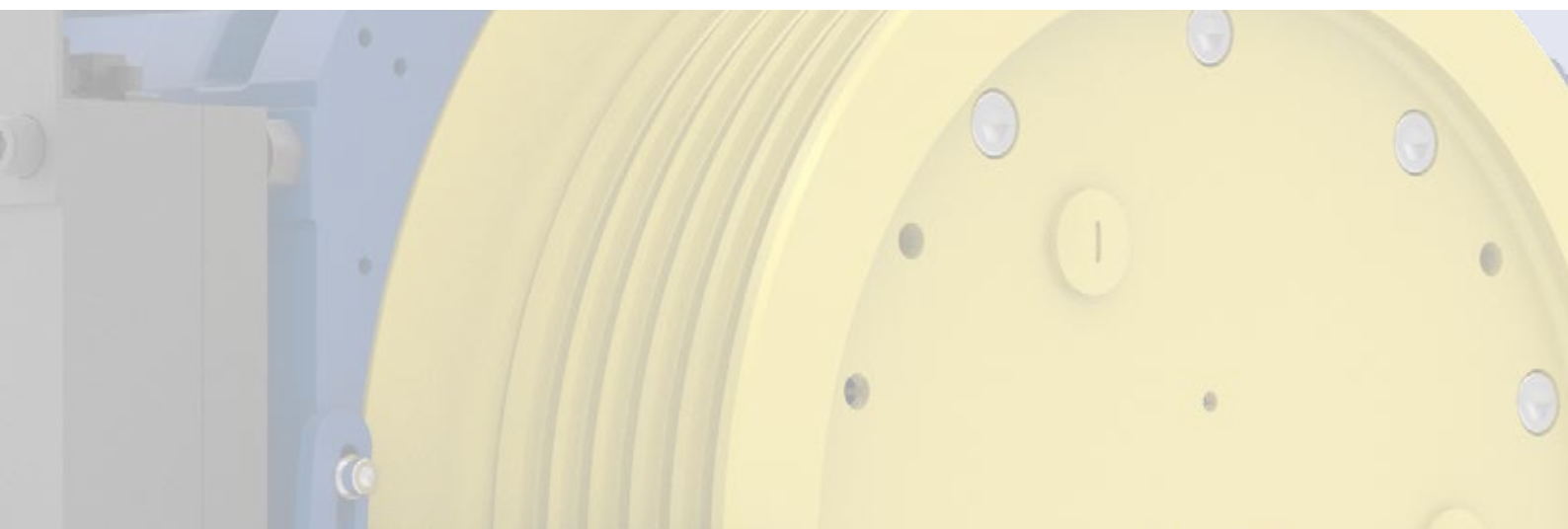


Movement by Perfection



The Royal League in ventilation, control and drive technology



ZA syn2

Gearless elevator machine SM500

ZAsyn2

Gearless elevator machine SM500

Over 100 years of experience in electric motor construction

We were the first to use external rotor motors

ZIEHL-ABEGG is a leading international developer and manufacturer of products in ventilation, control and drive technology. Extraordinary developments for countless application technologies in all of our business areas – this is the result of the expertise and unique technological competencies of our over 300 highly qualified engineers and technicians. The company was founded by Emil Ziehl. In 1910, he began constructing durable and efficient electric motors in Berlin.

Engineered in Germany - Produced in China

Our products are developed carefully and responsibly, manufactured in our own production sites and tested for the highest quality to satisfy current markets and demands, but above all to meet future requirements. ZIEHL-ABEGG – 4,300 employees, 16 production sites, 29 companies, 113 sales offices.



Your advantages:

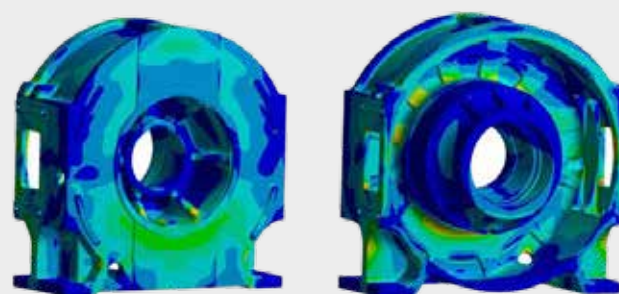
- Simple to install
- Suitable for machine-room installation
- Brake with manual hand release
- Short delivery time of the machines
- German Engineering
- Production at the ZIEHL-ABEGG Shanghai plant
- Reliable calculation with ZIEHL-ABEGG ZALift calculation software

The distinction of the Royal League represents the highest of quality standards

Our products fulfil extremely high quality standards, are inspected to ensure they are of the highest quality and are certified by independent test institutes. Each individual product leaves our factory following a stringent quality control process after which they can be given the distinction "The Royal League".



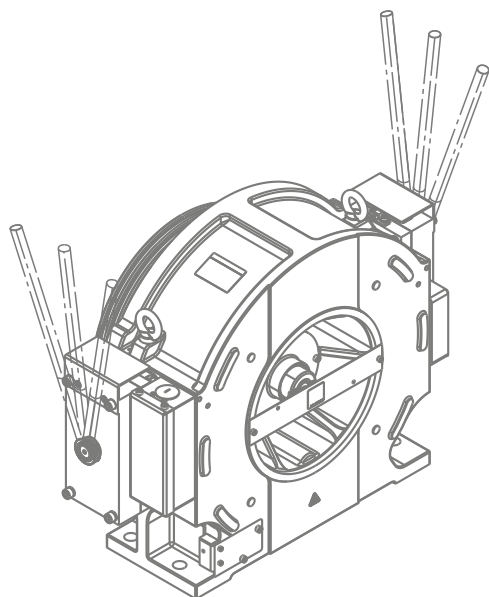
FEM - Finite element method Strength and deformation analysis of solids



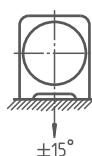
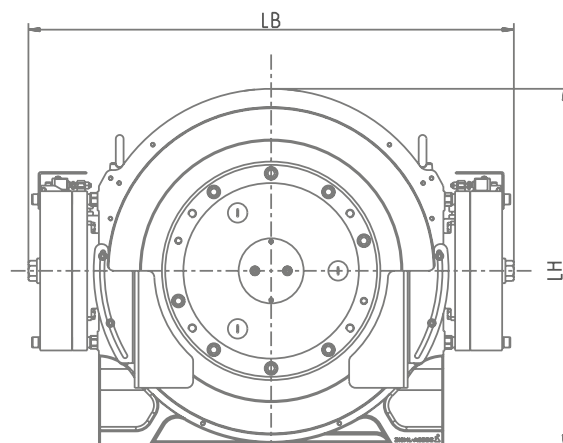
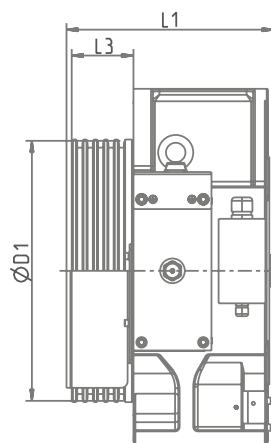
**Synchronous motor
actuated by permanent
magnets and according
to the provisions of the
Lift Directive 2014/33/EU
& EN81-20/50**



Technical details



Removable hand levers



Resulting rope force

Motor type	Nominal torque Nm	Max. axle load kg	Nominal speed min-1	Rated output power kW	L1 mm	LH mm	LB mm	D1 mm	L3 mm	Weight kg
SM500.12AL-B	510	3000	48 & 95	2,6 & 5,0	319	550	747	400	90	365
SM500.16AL-B	640			3,2 & 6,4						375

ZAlift - Calculation software

The best program to help you to configure our drive package for your elevator. Using your input, ZAlift selects the perfect combination of drive motor and frequency inverter.

ZAlift additionally offer great features to ease your design work for installation, operation and acceptance.

ZAlift functions

- Component selection for drive package
- Calculation for acceptance
- Information for installation
- Comprehensive rope database
- Backup of your calculation data

The screenshot shows the ZAlift software interface with the following fields and options:

- Project:** Elevator A
- Client:** Ziehl-Abegg
- User:** ffo
- Number of ropes:** 2
- side of car and counterweight:** 1
- Ball bearing / Sleeve bearing:** Ball bearing (selected)
- DRAKO 250 T:** 9,42 kg/m, 61700 N
- z-Factor:** 1
- Nominal load:** 1000 kg
- Car weight:** 1400 kg
- Countenweight:** 1900 kg
- Nominal speed:** 1 m/s
- Travel:** 20 m
- Suspension:** 2
- Number of ropes:** 5
- Rope diameter:** 16 mm (0,12 → 4,2)
- Rope weight:** 42,3 kg
- Compensation rope:** 0 kg
- Rope tension weight:** 0 kg
- Cable weight per meter:** 1 kg/m
- Special groove distance:** Standard mm
- Wrapping angle:** 180°
- Mustakt:** 1
- Info silent:**
 - ☒ Traction sheave calculation
 - ☒ A3/UCM
 - ☐ Bedplates
 - ☐ G-dringelast
 - ☐ Energy calculation

The Royal League

