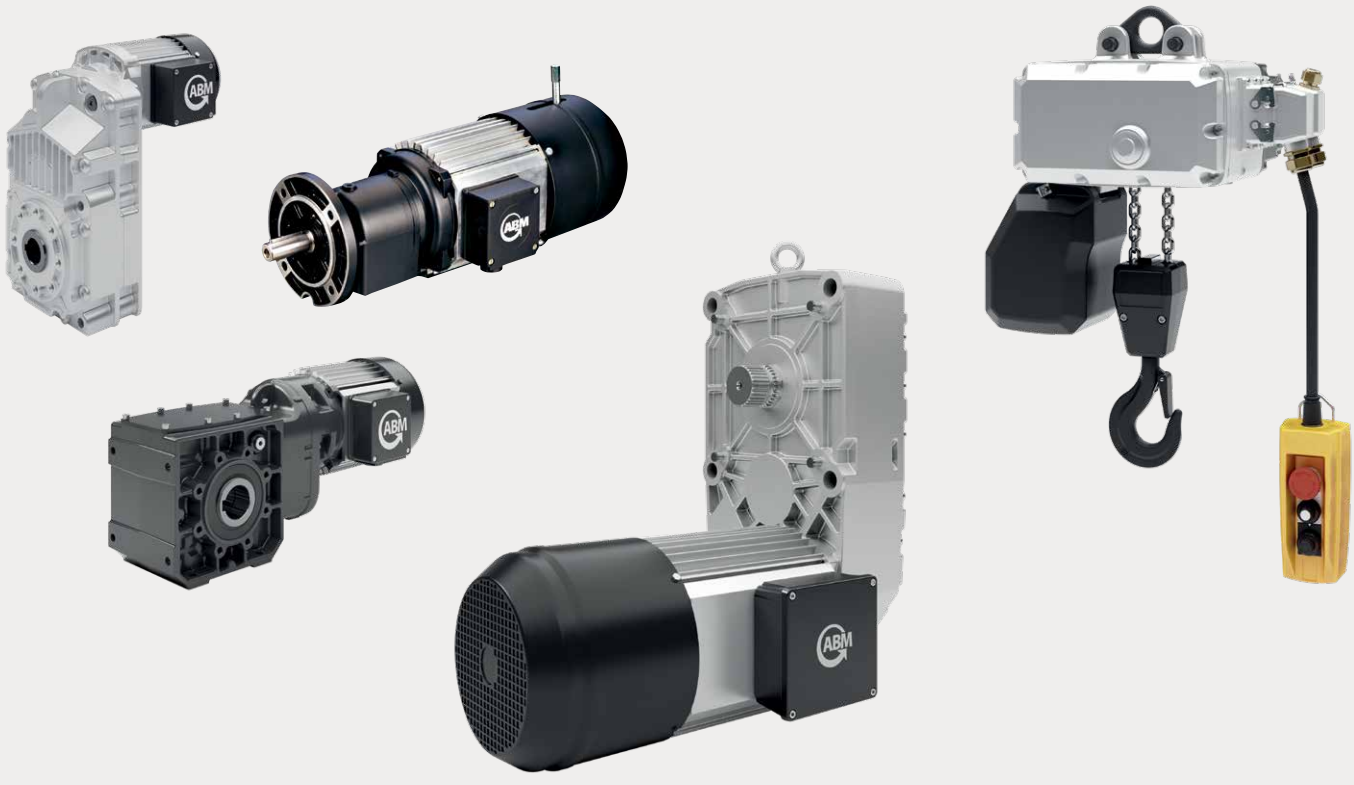
ABM Greiffenberger
We put ideas into gear

Member of senata Group

Maximum Performance

Drive Units for Cranes and Hoists

Complete System Solutions for your competitive Advantage



www.abm-drives.com

Maximum Performance

Drive Units for Cranes and Hoists

Complete System Solutions for your competitive Advantage.

40 years of experience and more than one million hoist drive units: This is the solid basis for the ABM Greiffenberger product range tailored to the high demands of the hoisting technology. We offer you a one-stop source for the complete system solution from hoist drives from hoist motors, travel drives and frequency inverters to electric chain hoists and entertainment hoists. Our powerful, durable and innovative solutions are sure to give you a competitive edge.

Move Forward Together – our well-respected global partners in the hoisting industry:

Durable & powerful

Hoist Drives

For precise, safe load handling.

Hoist drives from ABM Greiffenberger lift **loads of 3.2 t to 40 t** (rope reeving 4/1, FEM 2 m) with complete safety and reliability.
The aluminum housings are low weight and provide high corrosion resistance. U-shaped mounting of the cable drums allows simple and space-saving installation.

- Extended application range thanks to a larger center distance
- Doubled service life, FEM 2 m design with 4/1 rope reeving
- Lifting speed of up to 200 Hz without load with inverter operation shortens the cycle time
- Quiet running

Dynamic & low-vibration

Travel Drives

Ready-to-install system solutions.

The hoist drives and motors together with the travel drives from ABM Greiffenberger form **ready-to-install system solutions**. The travel drives are available as **helical, parallel shaft and angular gearboxes** – each with integrated safety brake. ABM Greiffenberger offers an appropriate solution **for every speed and accuracy requirement** with two product lines: Profi-Line travel drives enable two travel speeds, Automation-Line drives enable operation for reliable processes with variable speeds and satisfies the highest demands for positioning accuracy.

- Low-maintenance and corrosion-protected
- High-quality, quiet gearing
- Specific motor and gearbox designs
- High overall efficiency

Reliable & low-vibration

Hoist Motors

Many advantages due to ABM Greiffenberger know-how.

The starting current of the hoist motors is low, a dynamic ramp-up curve creates the prerequisite for high crane performance. Even at high throughput rates, ABM Greiffenberger hoist motors ensure precise, safe load handling with soft acceleration, extremely smooth running and low-wear safety brakes.

- Soft and safe acceleration
- Increased corrosion resistance
- Optimized starting and breakdown torques
- Reliable dual surface safety brake
- Certified to CE, UL/CSA

Modular & compact

Inverter VFD

Performance for any application.

With the VFD frequency inverter, ABM Greiffenberger offers the complete drive technology for cranes: The inverter can be individually parameterized to ensure optimal performance for any application. In addition, the number of travel drive versions can be reduced by powering different wheel diameters with the same variant.

- Compact, modular design
- Optimal control characteristics
- Easy commissioning
- Integrated PLC

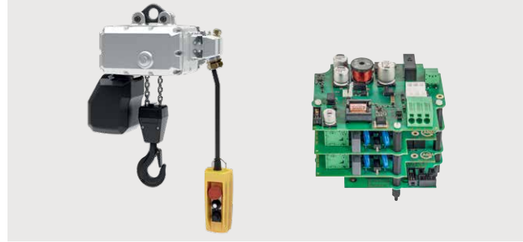
Safe & powerful

Electric Chain & Entertainment Hoists

Performance and reliability at high loads.

The electric chain and entertainment hoists can handle loads up to 2 tons. They feature great versatility, a compact design and reliable operation. ABM Greiffenberger has developed an **integrated electronic control system** specifically for electric chain hoists: The basic version for lifting and lowering can easily be supplemented with an additional **plug and play** circuit board for the horizontal travel function.

- Reliable overload protection through friction clutch
- Minimum energy consumption due to a high degree of efficiency
- Robust, low-maintenance & corrosion-protected
- Quiet running due to high-quality helical gearing
- Modular system with multiple options, e.g. electronic control



Long-lived & powerful

Hoist Drives

Advantages

Large center distance
→ Expanded usage range

Design per FEM 2M with reeving 4/1
→ Doubling of life time

Increased lifting speed up to 200 Hz without load in inverter operation
→ Shorter cycle times
→ Low noise operation due to high grade gearing

Direct motor mounting to gearbox without intermediate flange
→ Compact dimensions and reduced weight

Improved heat dissipation through gearbox housing
→ Optimum energy efficiency

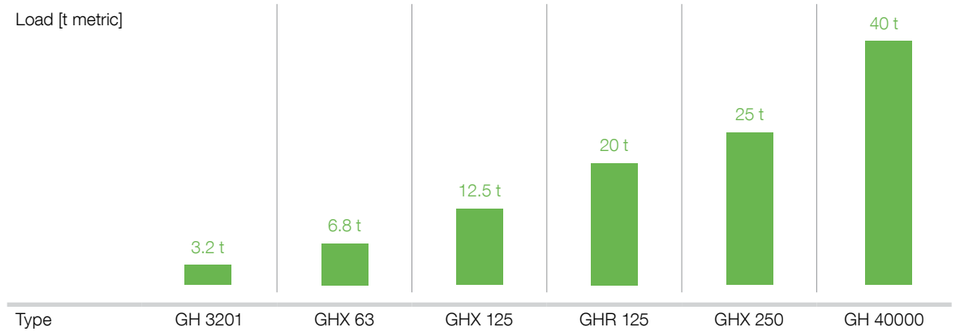
Aluminum housing
→ Low own weight and high corrosion resistance

High starting torque

Basic Data & Options

Motor type	12/2 poles or inverter operation
Rated output	up to 38 kW
Gear type	3-stage aluminum helical gearbox for direct mounting of drum
Lifting speeds	4 - 15 m/min with reeving 4/1
Drum diameter	140 - 405 mm
Lifting capacity	3.2 to 40 t (metric)
Protection class	IP54 (optional IP65)
Cooling	Cooling: self or separately driven fan
Design	Design per FEM
Brake	Dual surface safety brake Optional: quick reaction rectifier, function and wear monitoring
Standard	PTC and thermal sensors, tropics and corrosion protection, CE and UL/CSA approbated
Options	CSA approbated, encoder, separately driven fan, special power supply voltages Other FEM classifications and reeving upon request

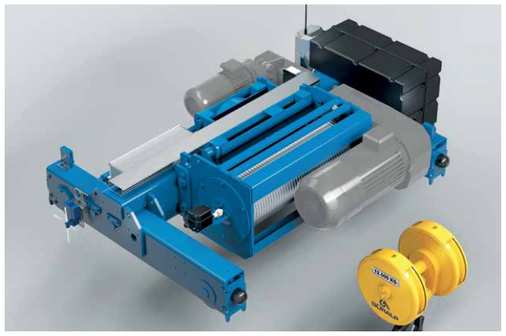
Output Overview | Reeving 4/1, FEM 2m

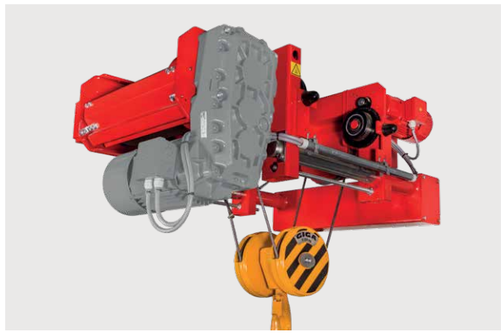


Technical Data

Type	GH 3201	GHX 63	GHX 125	GHR 200	GHX 250	GH 40000
Lifting capacity [t metric]	3.2	6.8	12.5	20	25	40 - 80
Lifting speeds [m/min]	4.0 - 8.0	4.0 - 8.0	4.0 - 8.0	4.0 - 8.0	4.0 - 8.0	2.6 - 7.6
FEM classification	2m	2m	2m	1Am	2m	1Am
Motor output [kW]	2.5 - 4.5	4.9 - 7.6	7.6 - 12.5	12.5 - 16	12.5 - 20.0	20.0 - 38.0
Output shaft per DIN 5480	W40x2x18x8f	W45x2x21x8f	W65x2x31x8f	W75x2x36x8f	W90x2x44x8f	W110x2x54x8f
Drum diameter [mm]	140	170 / 215 / 270	270 / 325	295 / 325	325 / 405	405
Protection class	Motor IP65, brake IP54 (optional IP65)					

Application Examples





Dynamic & low vibration

Travel Drives

Advantages

Design per FEM

Low vibration movement of loads

Low noise and long life due to high grade gearing

Safety with integrated dual surface safety brake

Comprehensive mounting options (helical, parallel shaft and angular gearboxes)

Robust and maintenance free

Aluminum housing
→ Low own weight and high corrosion resistance

High overall efficiency

Compact design

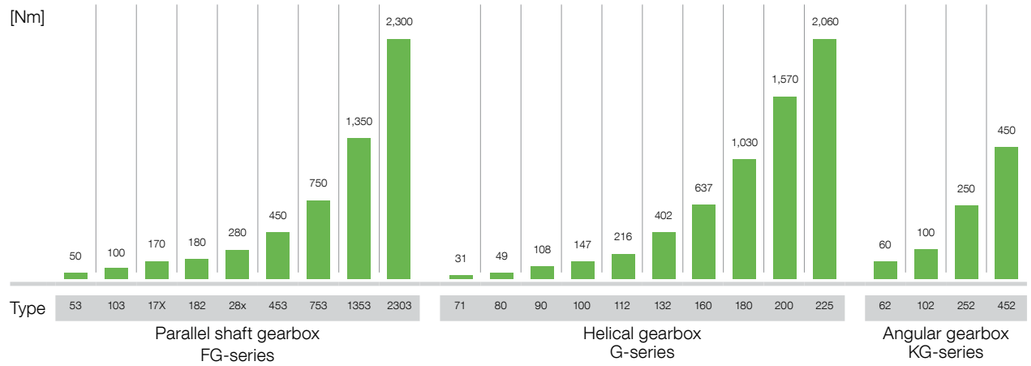
High gear reduction ratios

Optimally adapted to customer requirements

Basic Data & Options

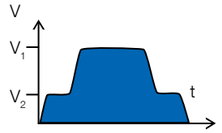
	PROFI-LINE	AUTOMATION-LINE
Power supply voltages	380 - 415 V 50 Hz (440 - 480 V 60 Hz)	380 - 415 V 87 Hz
Number of poles / connections	8/2 poles star / star	4 pole delta
Travel speed	5/20 m/min // 10/40 m/min	20 m/min // 40 m/min
Duty cycle	FEM 2m	
Acceleration	with load = 0.1 m/s² without load < 0.6 m/s²	
Output torque helical gearbox	31 - 2,060 Nm	
Output torque parallel shaft gearbox	170 - 2,300 Nm	
Output torque angular gearbox	60 - 450 Nm	
Service factor	> 1.5	> 1.3
Protection class / Style	IP54, aluminum junction box	
Brake	Dual surface brake	
Output shaft	Solid or spline shaft per DIN 5480	
Options	Phase isolation, protection class IP65, UL / CSA approbated, thermal sensors, PTC resistor, brake with manual release, motor connection through quick disconnects special travel speeds upon request	

Output Overview



Two lines for every travel speed and positioning requirement

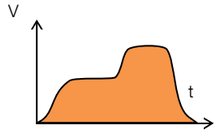
PROFI-LINE



→ Two travel speeds

→ Safe soft starts with 2-speed motors (8/2 poles) with specially designed windings and rotors and integrated oscillating weight

AUTOMATION-LINE



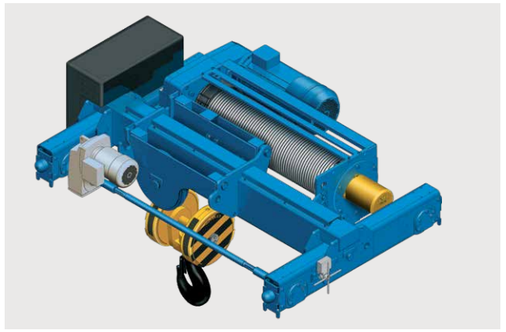
→ Variable travel speeds for maximum positioning accuracy

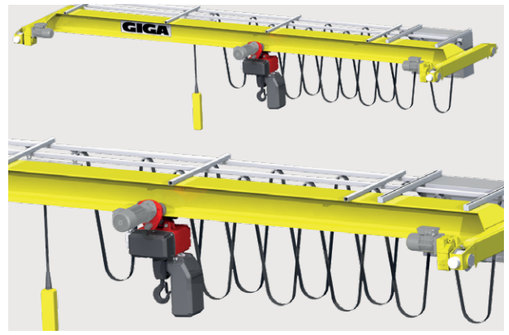
→ 4-pole motors with 87 Hz characteristics designed specifically for inverter operation

→ Individual inverter tuning of important parameters

→ Particularly soft start and stop characteristics reduces load oscillation to a minimum

Application Examples





Modular & compact

Inverter VFD

Advantages

Individual parametrization
→ Optimum performance

Reduced number of versions
→ Different wheel diameters can be used with one type of travel drive

87 Hz characteristics

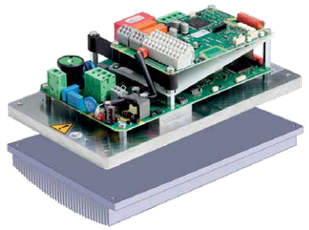
Compact design

Modular design

Excellent control properties

Simple start-up

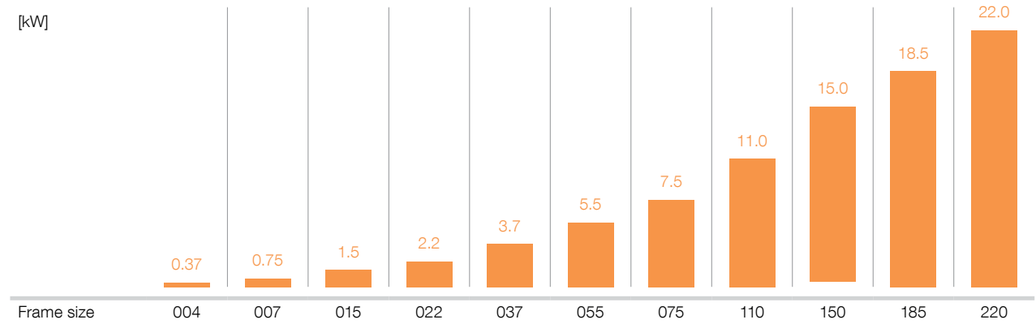
Integrated PLC



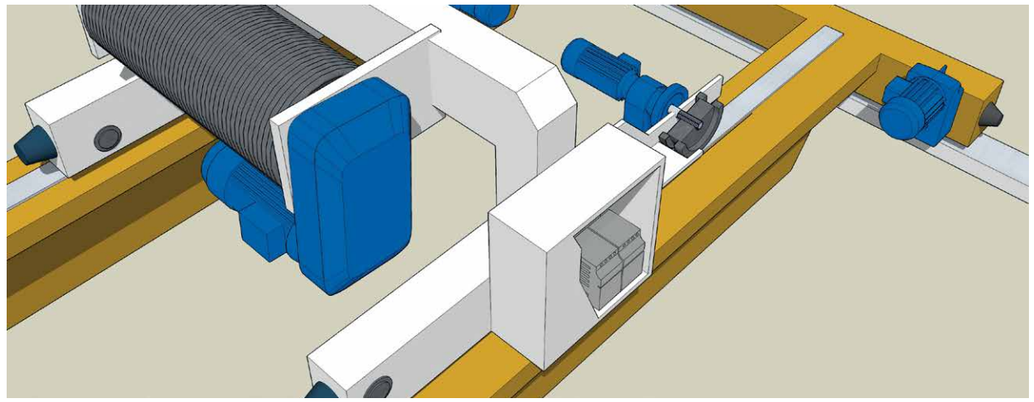
Basic Data & Options

Input voltage	1-phase: 200 – 240 V 3-phase: 380 – 480 V
Input frequency	50 – 60 Hz
Motor output	0.37 – 22.0 kW
Output voltage	0 V – power supply voltage
Output frequency	0 – 599 Hz
Control algorithm	U/f (multi-motor operation), sensorless and field oriented vector control
Brake chopper	integrated
Protection class	IP20
Fieldbus	Profibus, CANopen, Device Net, Lon Works, MODBUS
Options	Keypad, parameter interface, commissioning software Expansion module

Output Overview



Application Example



Safe & powerful

Chain & Entertainment Hoists

Advantages - Mechanical

Reliable overload protection with friction clutch

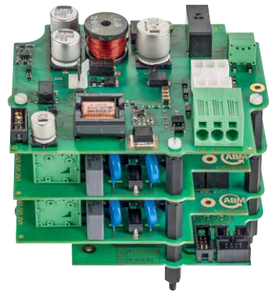
Minimum energy consumption due to a high degree of efficiency

Robust, low maintenance & corrosion protected

Low noise and energy efficient operation with high grade helical gearing

Modular design with many options

Advantages - Electronics



Integrated electronic control
→ No wear of switch contacts such as relays, brakers etc.

Basis circuit board for lifting and lowering
→ Simple expansion of travel function by plug & play with only one board

Integrated protective function

Including brake activation

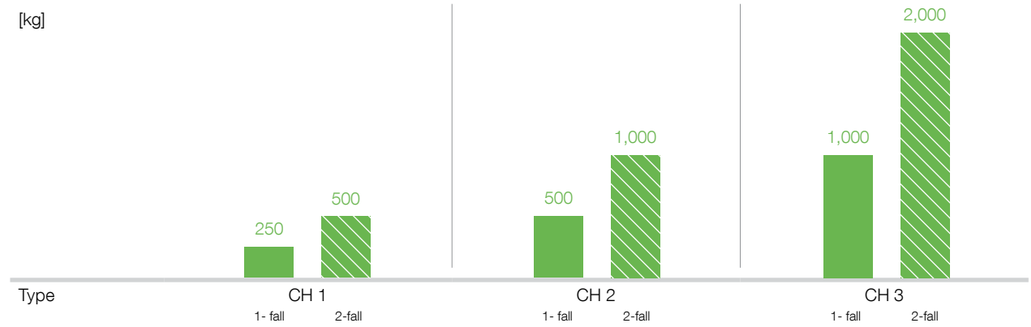
Long life & robust

Compact design

Basic Data

Lifting capacity	125 - 2,000 kg (1- resp. 2-fall operation)
FEM-classification	up to FEM 3m
Lifting speeds	2.5 to 10 m/min
Motor types	single speed induction motors / 2-speed motors

Output Overview



Basic Configuration & Options

		Basic Configuration	Options
Lifting speeds	Single speed		⊗
	Two speed	✓	
Power supply voltage	380 - 415 V / 50 Hz (440 - 480 V / 60 Hz upon request)	✓	
	Special voltages / frequencies		⊗
Mounting bracket	Eye bolt	✓	
	Rotating hook mounting		⊗
Control	Direct control	✓	
	Integrated electronic control: lifting & lowering		⊗
	Integrated electronic control: lifting, lowering & travel		⊗
Limit switch	Stopping at highest and lowest hook position		⊗
Limit switch	Adjustable lifting height		⊗
Additional options	Load hook, intermediate ring		⊗

Application Examples

ABM Greiffenberger
We put ideas into gear

Member of senata Group

Dynamics for each Application and Use

We drive the World

A dense network of international subsidiaries and sales offices in all major industrial countries ensure close contact with our customers around the world – and guarantee an excellent standard of service.

Kindly contact us for further detailed information.

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