

..... DRIVE TECHNOLOGY  
for cranes and hoists



We put ideas into gear.  
ABM Greiffenberger Antriebstechnik



## ABM Drives for Crane and Lifting Technology

Lifting and conveying of loads require powerful and reliable drives. Harsh environments and unfavorable conditions such as low power supply or aggressive surroundings should not have an impact on proper operation. ABM's units are designed to withstand these conditions and to meet or exceed the highest expectations for more than 25 years. Travel and hoist units benefit from ABM's vast experience and are consequently optimised for top quality and usage, improving the competitive edge of our customers. Conformity with relevant standards, such as CE, VDE, DIN, UL / CSA, CCC etc., allow simple registration and approval of a crane system.



## The Three Product Lines of Crane Travel Drives

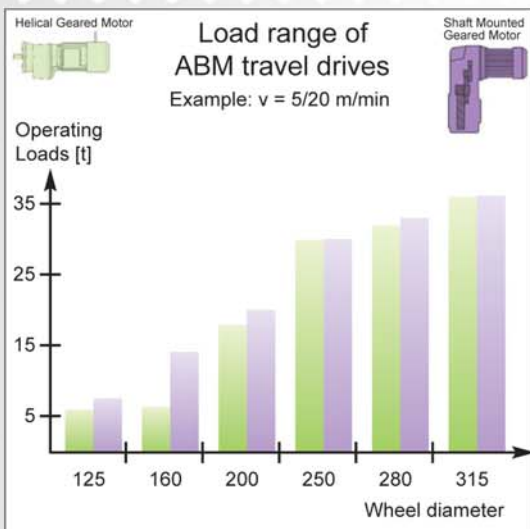
ABM travel drives are available as helical or shaft mounted geared motors. Depending on the application, travel drives are offered in three product lines, differentiated in drive characteristic and usage:

- ECO-LINE
- PROFI-LINE
- AUTOMATION-LINE

All drive systems represent compact units consisting of gearbox, motor and brake.

This offers the following advantages to the user:

- Robust, high quality drive unit
- Reliable soft start
- Minimised swinging motions of hanging loads
- Soft braking
- Precise positioning
- Very low maintenance
- Integrated safety brakes with minimal wear
- Versatile mounting options
- Long life
- Low weight
- Highly corrosion-resistant

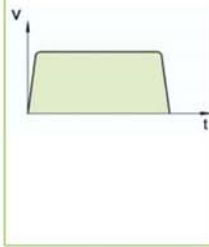




## ECO-LINE



drive characteristic



The **ECO-LINE** is operating in single speed and applies to travel operations of lifted loads with a satisfactory stopping precision.

Technical features:

- Aluminum housing
- Special rotor for soft start
- Fly wheel with bearings on both sides
- Minimal wear brake

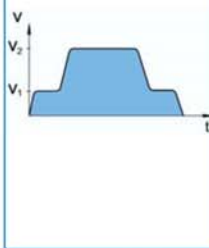
Applications:

- Transport of long goods
- Handling and storage of I-beams

## PROFI-LINE



drive characteristic



The **PROFI-LINE** is operating in two speeds with higher demands on positioning of lifted loads. Maximum output is available any time.

Technical features:

- Aluminum housing
- Special rotor for soft start
- Fly wheel with bearings on both sides
- Special 8/2-pole winding characteristics
- Minimal switching impulse
- Wear reduces brake

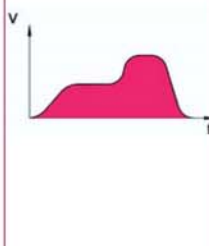
Applications:

- Minimised swing in transport of sheet metal and coils
- Handling of containers

## AUTOMATION-LINE



drive characteristic



The **AUTOMATION-LINE** is operating in variable speeds for maximum demands for movement and positioning of lifted loads. Optimum speed, minimised swinging motion and sensitive positioning are combined to minimize cycle times.

Technical features:

- Aluminum housing
- Variable drive speeds
- Special long life winding insulation
- Dynamic motor characteristic
- Minimal wear brake
- Adjustable acceleration and deceleration ramps

Applications:

- Delicate assembly operations
- Handling and transport of glass
- Precise positioning of cast tools
- Warehouse operations



## ABM Hoist Motors

ABM hoist motors are available in different frame sizes with outputs from 0.37 to 24 kW.

Special features:

- High start and stall torque
- Soft and safe acceleration
- High power density
- Long lifetime

Technical features:

- Specification according to FEM, HMI, etc.
- Low start current
- Quiet operation
- Dynamic acceleration characteristic
- Optimised switching properties for 2-speed motors
- Double-surface safety brake
- Upgraded insulation for inverter operation



## ABM Hoist Units

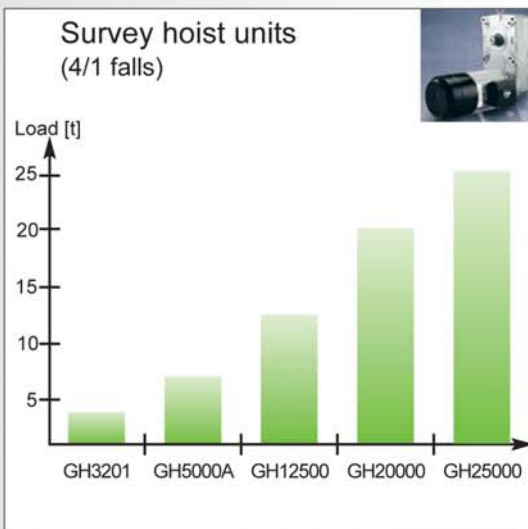
The ABM range of hoist units offers specifically geared motors with brakes for direct drive of rope drums in five sizes. The hoist unit design is based on FEM calculations for standard lifting gear allowing safe and reliable lifting of loads from 3.2 to 25 tons in 4/1 falls.

Advantages for the user:

- Compact and heavy duty drive units
- Large axis base for assembly in U-design
- Direct mounting of rope drums
- Available in lifting speeds of 4 / 5 / 6.3 and 8 m/min (4/1 falls)
- Low weight of drive unit
- Easy to mount

Technical features:

- Motor housing and gearbox made of aluminum
- Common interfaces for hoist units
- Low-noise gearing design
- Lifetime lubrication
- Double-surface brake



## ABM Brakes

For hoist motors and units brakes are generally designed as double-surface safety brakes and offer the following advantages:

- Reliable operation and high cycle frequency
- Minimal wear / long life time  
(1 Million cycles without adjustment)
- Automatic braking in case of power loss
- Safe braking by minimized load swinging
- Asbestos-free brake pads
- Stroke limiter for wear indication



# Hoist Drive GH 3201 for Wire Rope Hoist - frequency controlled -



## Description

- Compact hoist drive for wire rope hoists, designed according FEM regulations
- 3-stage Aluminum shaft mounted drive for direct mounting onto the drum
- Powerful hoist motor equipped with two-surface safety brake
- Easy assembling by a defined interface

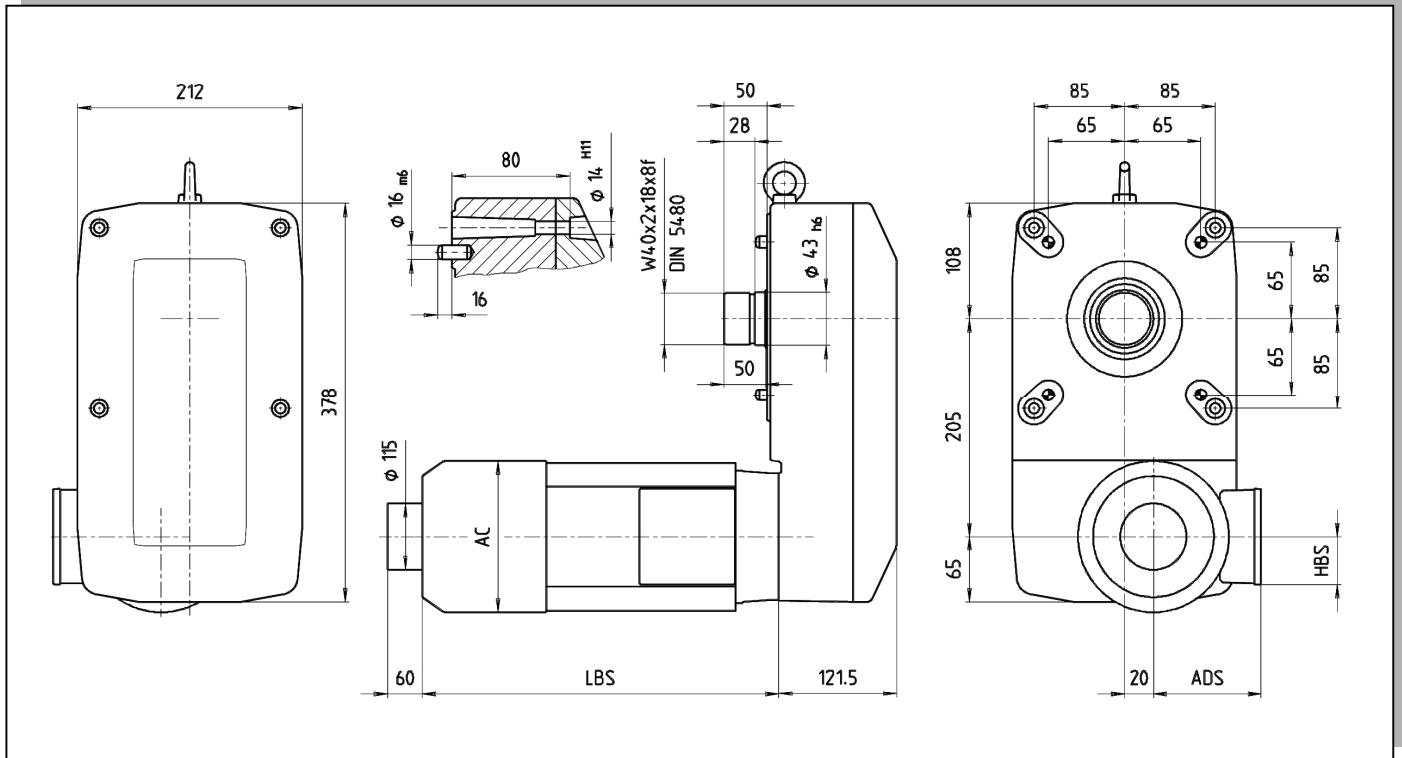
## Technical Data

- Load: up to 3.2 t
- Lifting speed: 4 / 5 / 6.3 / 8 m/min at 4/1 falls
- Drum diameter: 140 mm
- Motor Power: P = 2,5 – 4.0 kW (4-pole @ 100Hz)
- Output shaft DIN 5480: W40x2x18x8f

## Advantages - Benefits

- Light weight – low transport costs, easy mounting
- High efficiency – energy saving
- Compact design – small space requirement
- Increased axle distance
- Dynamic speed torque curve – high start and brake-down torque
- Two-surface safety brake – smooth and safe braking
- Bearing support of drum integrated into hoist drive

# Hoist Drive GH 3201 for Wire Rope Hoist - frequency controlled -



## Technical Data Hoist Drive GH 3201

→ Drum diameter 140 mm

→ Falls 4/1

Pos.	Load [t]	ISO	FEM	v [m/min]	P [kW]	f [Hz]	Ratio [-]	Torque [Nm]	Type	Motor related dimensions [mm]
1	3.2 2.5 2	M5 M6 M7	2m 3m 4m	0.66 - 4.0 (0.8 - 4.8)	2.5 (3.0)	100 (120)	78.63	28	ZFB40/GH3201/4D100La-4	AC: 195 LBS: 372 ADS: 141 HBS: 61.5
2	3.2 2.5 2	M5 M6 M7	2m 3m 4m	0.8 - 5.0 (1.0 - 6.0)	3.2 (3.8)	100 (120)	62.59	28	ZFB40/GH3201/4D100Lb-4	AC: 195 LBS: 372 ADS: 141 HBS: 61.5
3	3.2 2.5 2	M5 M6 M7	2m 3m 4m	1.0 - 6.3 (1.2 - 7.6)	4 (4.8)	100 (120)	49.46	40	ZFB40/GH3201/4D100Lb-4	AC: 195 LBS: 372 ADS: 141 HBS: 61.5
4	2.5 2 1.6	M5 M6 M7	2m 3m 4m	1.3 - 8.0 (1.6 - 9.6)	4 (4.8)	100 (120)	39.37	40	ZFB40/GH3201/4D100Lb-4	AC: 195 LBS: 372 ADS: 141 HBS: 61.5

# Hoist Drive GH 5000A for Wire Rope Hoist - frequency controlled -



## Description

- Compact hoist drive for wire rope hoists, designed according FEM regulations
- 3-stage Aluminum shaft mounted drive for direct mounting onto the drum
- Powerful hoist motor equipped with two-surface safety brake
- Easy assembling by a defined interface

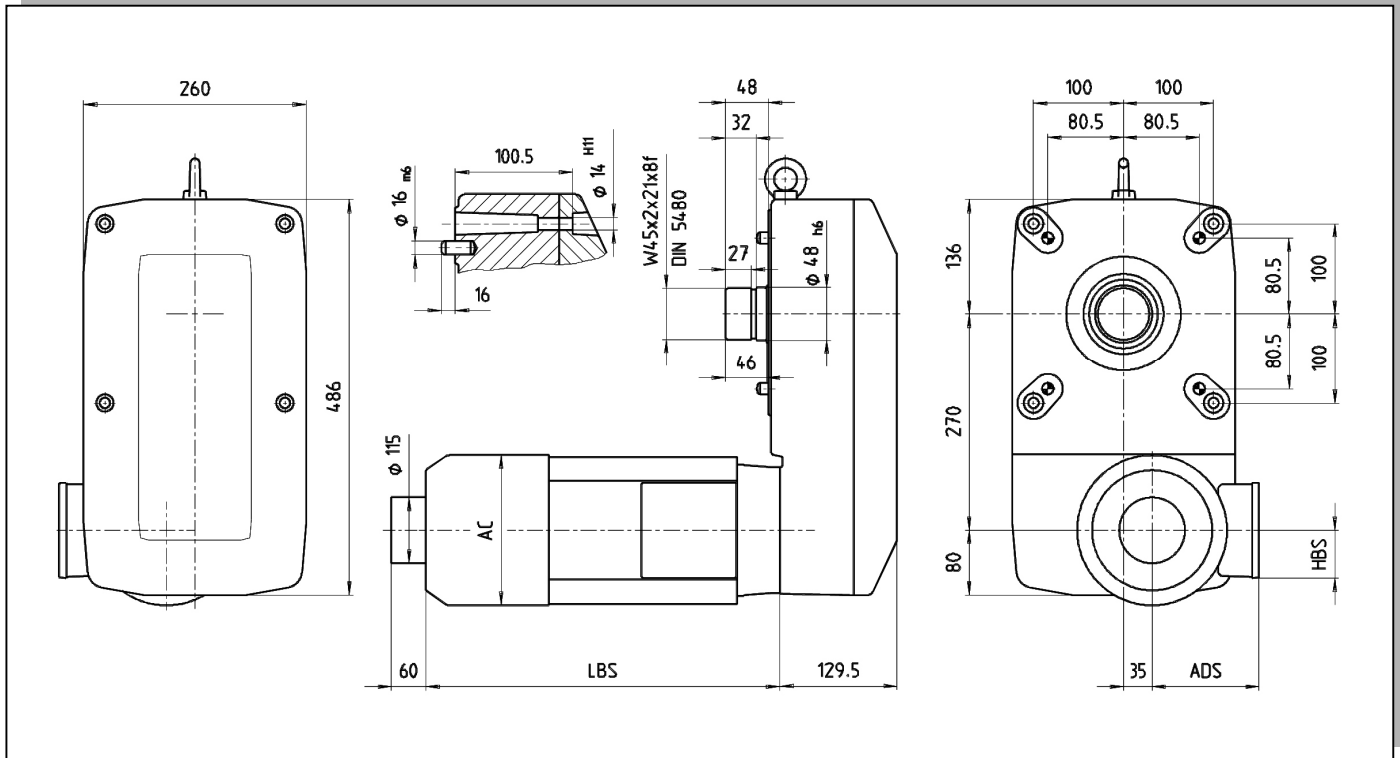
## Technical Data

- Load: up to 6,8 t
- Lifting speed: 4 / 5 / 6.3 / 8 m/min at 4/1 falls
- Drum diameter: 170 mm
- Motor Power:  $P = 4.9 - 9.5$  kW (4-pole @ 100Hz)
- Output shaft DIN 5480: W45x2x21x8f

## Advantages - Benefits

- Light weight – low transport costs, easy mounting
- High efficiency – energy saving
- Corrosion-resistant – no further coating necessary
- Compact design – small space requirement
- Increased axle distance
- Dynamic speed torque curve – high start and brake-down torque
- Two-surface safety brake – smooth and safe braking
- Bearing support of drum integrated into hoist drive

# Hoist Drive GH 5000A for Wire Rope Hoist - frequency controlled -



## Technical Data Hoist Drive GH 5000A

→ Drum diameter 170 mm

→ Falls 4/1

Pos.	Load [t]	ISO	FEM	v [m/min]	P [kW]	f [Hz]	Ratio [-]	Torque [Nm]	Type	Motor related dimensions [mm]
1	6.8	M5	2m	0.66 - 4.0 (0.8 - 4.8)	4.9 (5.9)	100 (120)	91.2	45	ZFB60/GH 5000A/4D112Mb-4	AC: 220 LBS: 438 ADS: 152 HBS: 58
2	6.8	M5	2m	0.8 - 5.0 (1.0 - 6.0)	6.1 (7.3)	100 (120)	74.8	60	ZFB60/GH 5000A/4D112Mb-4	AC: 220 LBS: 438 ADS: 152 HBS: 58
3	6.8	M4	1Am	1.0 - 6.3 (1.2 - 7.6)	7.6 (9.1)	100 (120)	59.9	70	ZFB100/GH 5000A/4D132Mb-4	AC: 270 LBS: 540 ADS: 190 HBS: 84
4	6.8	M4	1Am	1.3 - 8.0 (1.6 - 9.6)	9.5 (11.4)	100 (120)	49.1	100	ZFB100/GH 5000A/4D132Mb-4	AC: 270 LBS: 540 ADS: 190 HBS: 84



# Hoist Drive GH 12500 for Wire Rope Hoist - frequency controlled -



## Description

- Compact hoist drive for wire rope hoists, designed according FEM regulations
- 3-stage Aluminum shaft mounted drive for direct mounting onto the drum
- Powerful hoist motor equipped with two-surface safety brake
- Easy assembling by a defined interface

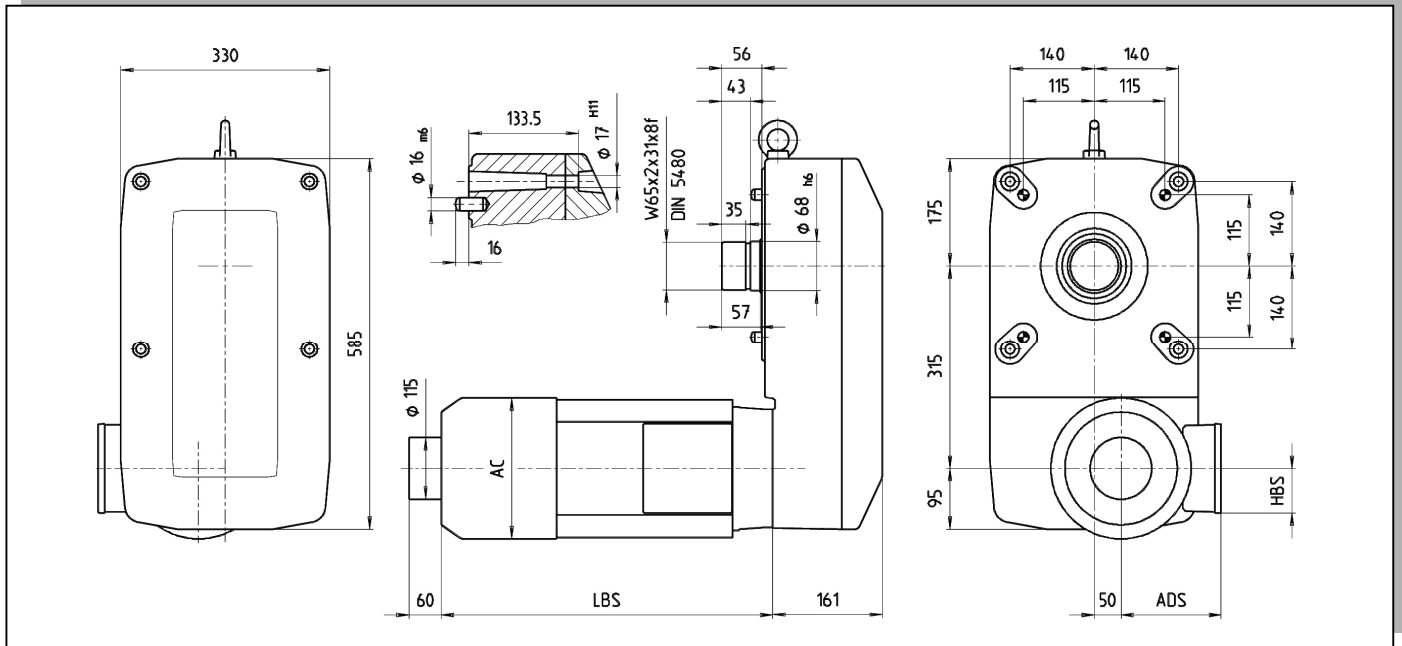
## Technical Data

- Load: up to 12.5 t
- Lifting speed: 4 / 5 / 6.3 / 8 m/min at 4/1 falls
- Drum diameter: 266 mm
- Motor power:  $P = 7.6 - 12.5$  kW (4-pole @ 100Hz)
- Output shaft DIN 5480: W65x2x31x8f

## Advantages - Benefits

- Light weight – low transport costs, easy mounting
- High efficiency – energy saving
- Corrosion-resistant – no further coating necessary
- Compact design – small space requirement
- Increased axle distance
- Dynamic speed torque curve – high start and brake-down torque
- Two-surface safety brake – smooth and safe braking
- Bearing support of drum integrated into hoist drive

# Hoist Drive GH 12500 for Wire Rope Hoist - frequency controlled -



## Technical Data Hoist Drive GH 12500

→ Drum diamter 266 mm

→ Falls 4/1

Pos.	Load [t]	ISO	FEM	v [m/min]	P [kW]	f [Hz]	Ratio [-]	Torque [Nm]	Type	Motor related dimensions [mm]
1	10	M5	2m	0.66 - 4.0 (0.8 - 4.8)	7.6 (9.1)	100 (120)	152.9	70	ZFB100/GH12500/4D132Mb-4	AC: 270
	8	M6	3m							LBS: 549
	6.3	M7	4m							ADS: 190
	5	M7	4m							HBS: 84
2	10	M5	2m	0.8 - 5.0 (1.0 - 6.0)	9.5 (11.4)	100 (120)	118.5	100	ZFB100/GH12500/4D132Mb-4	AC: 270
	8	M6	3m							LBS: 549
	6.3	M7	4m							ADS: 190
	5	M7	4m							HBS: 84
3	8	M5	2m	1.0 - 6.3 (1.2 - 7.6)	9.5 (11.4)	100 (120)	93.9	100	ZFB100/GH12500/4D132Mb-4	AC: 270
	6.3	M6	3m							LBS: 549
	5	M7	4m							ADS: 190
	4	M7	4m							HBS: 84
4	6.3	M5	2m	1.3 - 8.0 (1.6 - 9.6)	9.5 (11.4)	100 (120)	73.6	100	ZFB100/GH12500/4D132Mb-4	AC: 270
	5	M6	3m							LBS: 549
	4	M7	4m							ADS: 190
	3.2	M7	4m							HBS: 84
5	12.5	M5	2m	0.66 - 4.0 (0.8 - 4.8)	9.5 (11.4)	100 (120)	152.9	100	ZFB100/GH12500/4D132Mb-4	AC: 270
	10	M6	3m							LBS: 549
	8	M7	4m							ADS: 190
	6.3	M7	4m							HBS: 84
6	12.5	M4	1Am	0.8 - 5.0 (1.0 - 6.0)	12.5 (15.0)	100 (120)	118.5	100	ZFB100/GH12500/4D132Mb-4	AC: 270
	10	M5	2m							LBS: 549
	8	M6	3m							ADS: 190
	6.3	M7	4m							HBS: 84
7	10	M4	1Am	1.0 - 6.3 (1.2 - 7.6)	12.5 (15.0)	100 (120)	93.9	100	ZFB100/GH12500/4D132Mb-4	AC: 270
	8	M5	2m							LBS: 549
	6.3	M6	3m							ADS: 190
	5	M7	4m							HBS: 84
8	8	M4	1Am	1.3 - 8.0 (1.6 - 9.6)	12.5 (15.0)	100 (120)	73.6	100	ZFB100/GH12500/4D132Mb-4	AC: 270
	6.3	M5	2m							LBS: 549
	5	M6	3m							ADS: 190
	4	M7	4m							HBS: 84

# Hoist Drive GH 20000 for Wire Rope Hoist - frequency controlled -



## Description

- Compact hoist drive for wire rope hoists, designed according FEM regulations
- 3-stage Aluminum shaft mounted drive for direct mounting onto the drum
- Powerful hoist motor equipped with two-surface safety brake
- Easy assembling by a defined interface

## Technical Data

- Load: up to 20 t
- Lifting speed: 4 / 5 / 6.3 / 8 m/min at 4/1 falls
- Drum diameter: 295 mm
- Motor power: P = 12.5 – 16.0 kW (4-pole @ 100Hz)
- Output shaft DIN 5480: W75x2x36x8f

## Advantages - Benefits

- Light weight – low transport costs, easy mounting
- High efficiency – energy saving
- Corrosion-resistant – no further coating necessary
- Compact design – small space requirement
- Increased axle distance
- Dynamic speed torque curve – high start and brake-down torque
- Two-surface safety brake – smooth and safe braking
- Bearing support of drum integrated into hoist drive





# Hoist Drive GH 25000 for Wire Rope Hoist - frequency controlled -



## Description

- Compact hoist drive for wire rope hoists, designed according FEM regulations
- 3-stage Aluminum shaft mounted drive for direct mounting onto the drum
- Powerful hoist motor equipped with two-surface safety brake
- Easy assembling by a defined interface

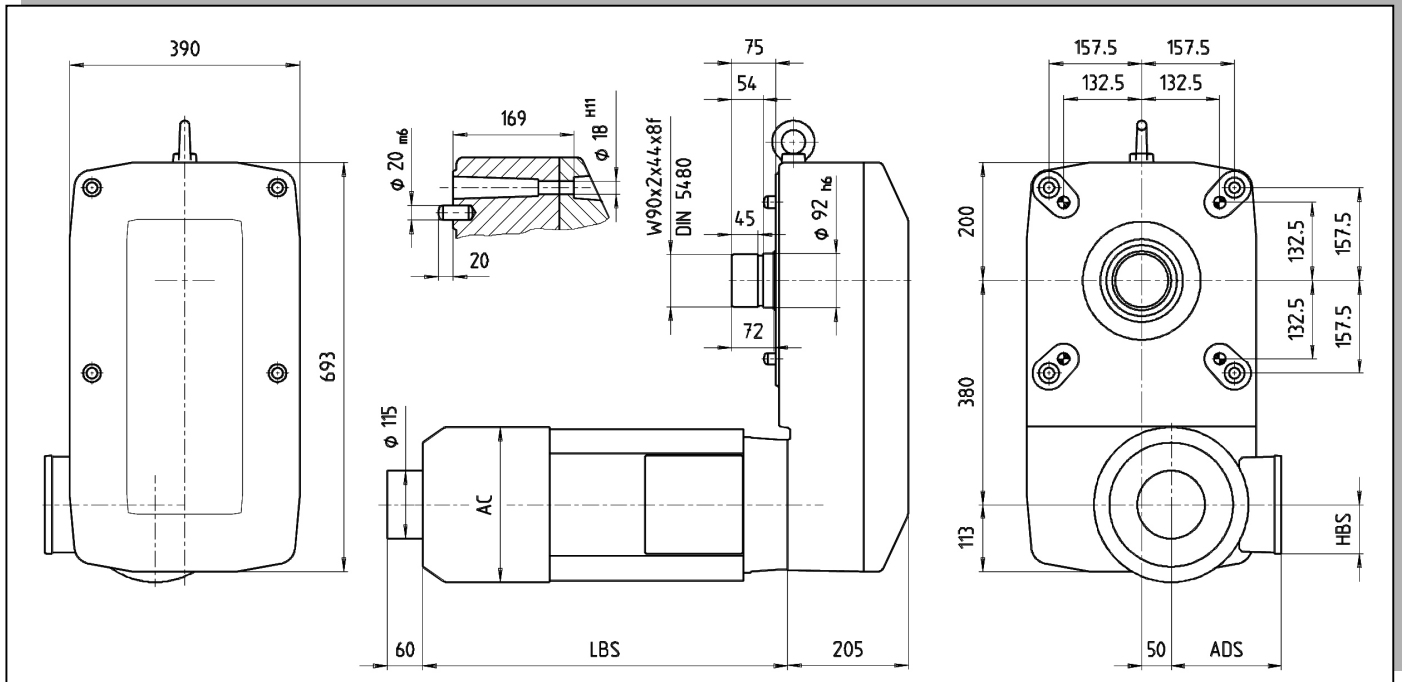
## Technical Data

- Load: up to 25 t
- Lifting speed: 3.4 / 4.2 / 5.4 / 6.7 m/min at 4/1 falls
- Drum diameter: 325 mm
- Motor Power: P = 12.5 – 16.0 kW (4-pole @ 100Hz)
- Output shaft DIN 5480: W90x2x44x8f

## Advantages - Benefits

- Light weight – low transport costs, easy mounting
- High efficiency – energy saving
- Corrosion-resistant – no further coating necessary
- Compact design – small space requirement
- Increased axle distance
- Dynamic speed torque curve – high start and brake-down torque
- Two-surface safety brake – smooth and safe braking
- Bearing support of drum integrated into hoist drive

# Hoist Drive GH 25000 for Wire Rope Hoist - frequency controlled -



## Technical Data Hoist Drive GH 25000

→ Drum diameter 325 mm

→ Falls 4/1

Pos.	Load [t]	ISO	FEM	v [m/min]	P [kW]	f [Hz]	Ratio [-]	Torque [Nm]	Type	Motor related dimensions [mm]
1	20	M4	1Am	0.53 - 3.4 (0.63 - 4.1)	12.5 (15.0)	100 (120)	216.6	100	ZFB100/GH2500/4D132Mb-4	AC: 270
	16	M5	2m							LBS: 549
	12.5	M6	3m							ADS: 190
	10	M7	4m							HBS: 84
2	16	M4	1Am	0.65 - 4.23 (0.8 - 5.1)	12.5 (15.0)	100 (120)	174.9	100	ZFB100/GH25000/4D132Mb-4	AC: 270
	12.5	M5	2m							LBS: 549
	10	M6	3m							ADS: 190
	8	M7	4m							HBS: 84
3	12.5	M4	1Am	0.83 - 5.35 (1.03 - 6.4)	12.5 (15.0)	100 (120)	138.5	100	ZFB100/GH25000/4D132Mb-4	AC: 270
	10	M5	2m							LBS: 549
	8	M6	3m							ADS: 190
	6.3	M7	4m							HBS: 84
4	10	M4	1Am	1.03 - 6.7 (1.24 - 8.1)	12.5 (15.0)	100 (120)	110.7	100	ZFB100/GH25000/4D132Mb-4	AC: 270
	8	M5	2m							LBS: 549
	6.3	M6	3m							ADS: 190
	5	M7	4m							HBS: 84
5	25	M4	1Am	0.53 - 3.4 (0.63 - 4.1)	16 (19.2)	100 (120)	216.6	150	ZFB150/GH25000/4D132Mc-4	AC: 270
	20	M5	2m							LBS: 549
	16	M6	3m							ADS: 190
	12.5	M7	4m							HBS: 84
6	20	M4	1Am	0.65 - 4.23 (0.8 - 5.1)	16 (19.2)	100 (120)	174.9	150	ZFB150/GH25000/4D132Mc-4	AC: 270
	16	M5	2m							LBS: 549
	12.5	M6	3m							ADS: 190
	10	M7	4m							HBS: 84
7	16	M4	1Am	0.83 - 5.35 (1.03 - 6.4)	16 (19.2)	100 (120)	138.5	150	ZFB150/GH25000/4D132Mc-4	AC: 270
	12.5	M5	2m							LBS: 549
	10	M6	3m							ADS: 190
	8	M7	4m							HBS: 84
8	12.5	M4	1Am	1.03 - 6.7 (1.24 - 8.1)	16 (19.2)	100 (120)	110.7	150	ZFB150/GH25000/4D132Mc-4	AC: 270
	10	M5	2m							LBS: 549
	8	M6	3m							ADS: 190
	6.3	M7	4m							HBS: 84



