

User Guide

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Reel drive 4

00395_Haspelantrieb 4, 3x400V 50Hz
10001118_Haspelantrieb 4, 1x230V 50Hz
10002085_Haspelantrieb 4 verstärkt



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Liability and warranty provisions

The liability and warranty provisions of the general T&C of Jakob Rope Systems apply. Especially T&C points 10 and 11.

Preface

You made a good choice when you selected the HABEGGER reel drive 4. This reel drive allows you to wind up untensioned ropes. Operation and maintenance are very simple and with correct handling ensure trouble-free and reliable operation. It may be that you already know how your recently purchased reel drive functions.

However, at Jakob AG we recommend:

Read this operating manual carefully before first commissioning! It contains all essential information you require for the reel drive.

Important information in the operation manual help you:

- To avoid hazards,
- to keep repair costs and downtimes to a minimum and
- to increase the reliability and service life of your reel drive.

Always keep this operation manual at the place where the reel drive is used, and make sure that anyone who uses it reads and applies the information in the manual. It must be available for all operation personnel, to avoid errors during handling. As well as the operating manual and the locally applicable accident prevention regulations, the recognized specialist rules for safe and proper working must be complied with.

We wish you every success and enjoyment using your product from Jakob AG.

EC declaration of conformity



We

Jakob AG
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hereby declare that the

Reel drive 4

conforms to the health and safety requirements of the EC Machinery Directives in its conception and design, as well as in the version placed on the market by us.

In the event of improper use, as well as modifications or changes which are unauthorised by us, this statement loses its validity.

This declaration of conformity also loses its validity if the relevant user guide and maintenance manual are not followed or are violated.

Applicable EC Directive:

EC Machinery Directive 2006/42/EC

Applicable harmonized standards:

EN ISO 12100: 2011-01

Place:

Trubschachen

Date:

28. February 2024

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1 General description

The reel drive 4 is designed to wind up the untensioned rope exiting from the HIT-TRAC motorized rope pulling machine. The reel drive does not have a winding device. This means that the winding process must be observed and corrected if required.

The complete reel drive stands on two wheels and a support. It can be moved by the drawbar like a trailer. To do so, the drawbar can be swiveled outwards after pulling out the locking fixture. When not used, the drawbar can be swiveled in. Using the lifting eye, the reel drive can be lifted with a lifting device. Naturally, other ropes can also be wound up.

1.1 Drive

Drive is provided using an electric motor via gears and chains.

The motor acts on the reel like an infinitely long spring. If the resistance on the rope becomes greater than the spring force (motor), the reel stops.

1.2 Friction clutch

A friction clutch connects the reel with the drive and prevents unwanted rolling back of the reel.

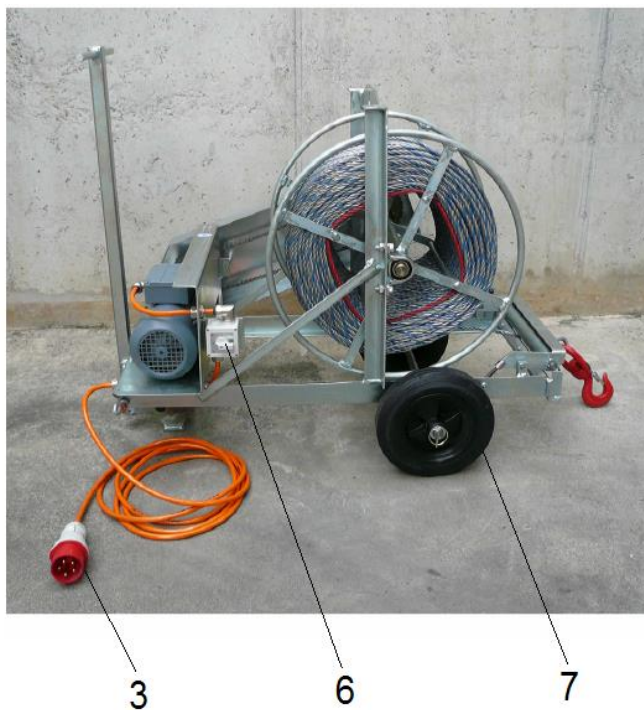
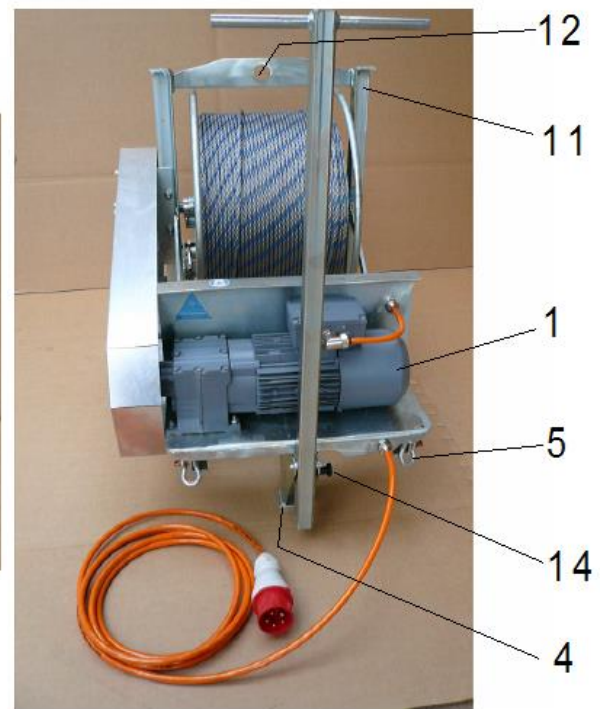
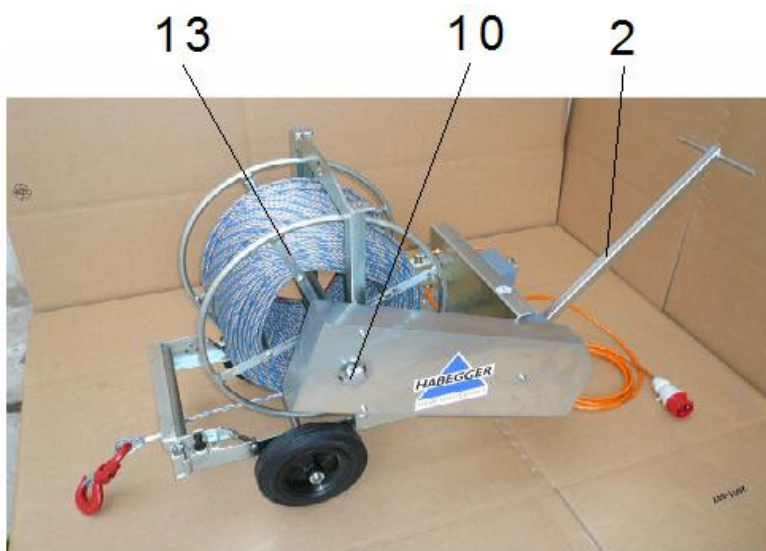
The friction clutch acts as a spring-loaded brake when rope is pulled out. When doing so, the reel is turned against the brake resistance. This prevents the reel running on once the pulling out procedure is stopped. The braking force can be reduced with the star handle.

For special applications, a longer control cable or a radio control can be attached. Within these applications, the rope pulling device must be monitored particularly when tensioning and lowering. Entry and exit of the idle rope must be ensured.

2 Design and function

- 1 Gear motor
- 2 Drawbar
- 3 Plug
- 4 Support foot
- 5 Shackle for attachment
- 6 Switch
- 7 Wheel
- 8 Bolt for cap

- 9 Flap for rope guidance (open)
- 10 Star handle
- 11 Bar supports
- 12 Eye supports
- 13 Reel with rope
- 14 Drawbar lock
- 15 Rope guide



3 Safety instructions



The HABEGGER Reel drive 4 conforms to the current state of the art. Due to its function, it has an open design.

To protect against accidents, it is equipped with effective safety devices according to the recognized technical safety standards, guidelines and laws.

However: Laws, regulations and safety devices do not offer protection against carelessness and negligence!

Only use the reel drive in perfect condition, complying with the operation manual.

Before you work with the reel drive, you must carefully read and comply with the safety information below.

This is for your safety!

3.1 Intended use

The reel drive is designed to wind up ropes.

3.2 Safety information in this operation manual

For hazards, notes and important information, the following symbols and descriptions are used:



- Notices are particularly important information which you must comply with when operating the equipment for its intended use.



- Caution! Note indicates hazard for the machine, machine parts and the environment.



- Danger! Note referring to hazards to health and the life of the operator and other persons.

3.3 General safety information

Location

- When working always make sure you have a firm and safe location to stand in.
- Always stand outside the hazard area of moving parts.
- You need sufficient room to move. Therefore, make sure you have a sufficiently large area to stand in.
- Do not use ladders as a standing area.
- If your location is unsuitable: Install deflection roller and select a better location.



- When installing the machine take care that no external hazards can act on the reel drive, the traction rope, the load and the operator personnel. (e.g. falling objects, passing vehicles, electrical overhead lines, and so on)

Operation

The reel only rotates slowly and with limited force. Nevertheless, make sure that nothing enters the open spokes.



- Danger! Do not stand in the hazard area of loads, deflection rollers and ropes!
- Do not reach into rotating parts. Risk of injury.



- Caution! As soon as the red end of the rope emerges: Stop the machine immediately.

3.4 Authorized operators

The reel drive 4 must only be used by a specialist person who is authorized. As the operating company for the reel drive, make sure that the operation manual is made accessible to the operator and ensure that they have read and understood it.

3.5 Warranty and liability

Warranty and liability claims for injury to persons or damage property are excluded if they are due to one or more of the following.

3.6 Behavior in an emergency situation

Before starting work, always inform yourself whether and where there is mobile phone reception or where a traditional telephone is available. Check the availability of a first-aid box.

4 Technical specifications

		00395_Haspelantrieb 4, 3x400V 50Hz 10001118_Haspelantrieb 4, 1x230V 50Hz	10002085_Haspelantrieb 4 verstärkt
Pulling force:		approx. 20 kg	approx. 74 kg
Winding speed		0 – 10 m/min	0 – 22 m/min
Rope capacity	Rope Ø8.2 mm	600 m	650 m
	Rope Ø11.2 mm	300 m	350 m
	Rope Ø16 mm	200 m	200 m
	Rope Ø20 mm	100 m	100 m
Dimensions Width / Length / Height:		592 mm / 831 mm / 940 mm	642 mm / 831 mm / 940 mm
Own weight		70 kg	75kg
Drive motor 3x400V:		Three-phase gear motor SEW R17MT80N8/BMG/HF 0.2 A, 50 Hz, IP 54	Three-phase gear motor SEW R17 DR2M71M12/BE1/V 0.87 A, 50 Hz, IP 54
Transmission oil		0.25L, CLP 220	0.25L, CLP 220
Power plug		CEE 16 16A (3xL+N+PE)	CEE 16 16A (3xL+N+PE)
Drive motor 1x230V:		Gear motor PAE 180M2 0.68 A, 50 Hz, IP 65	-
Power plug		T12 (1xL+N+PE)	

5 Operation

5.1 Preparation

Set up and attach reel drive approx. 6.5 m from the fixed point of the rope at a right angle to it. The attachment does not need to withstand large forces, however it must ensure that the reel drive is not pulled against the machine on smooth bases.

If the distance to the fixed point cannot be maintained, the rope is only wound onto the reel at one point. This means achieving an even distribution of the rope on the reel must be done using additional measures such as e.g. moving the rope with a piece of wood.

5.2 Operation

The rope must be pulled out actively, i.e. with a machine or manually.

As soon as the motor is switched on, the reel drive winds up the rope again, until the rope resistance becomes greater than the pulling force of the reel. This pulling force depends on the amount of rope wound on the reel. With longer lengths of rope, meaning a larger diameter of the reel, it reduces.

The motor can remain switched on throughout. This means the rope is either pulled off or wound up depending on the force acting on the rope.

Observe winding process and watch out for the end of the rope!

5.3 Pulling out rope

With the motor switched off, the rope can be pulled out by hand. When doing so, if the resistance is too high, the braking resistance can be reduced by undoing the star handle (turn anticlockwise). Only turn star handle to the stop.

To wind up, the star handle must be screwed in fully once more.

6 Faults

Faults	Possible cause	Measures
Reel does not turn, once the motor is switched on and the rope is not tensioned	No power	Check supply cable and fuse
	Motor rotation direction incorrect	Change phases (possibly on extension cable)
	Friction clutch (brake) undone	Screw in star handle
	Friction clutch (brake) set too loose	Have friction clutch readjusted
	Rope jammed	Release rope
Pulling off rope too hard	Friction clutch (brake) set too tight	Have friction clutch readjusted

7 Maintenance

The following items of inspection and maintenance work must be carried out:

Work	At the start of work	As required	Comments
General visual inspection:	X		
Lubricate shaft bearing points		X	
Replace gear oil			every 3 years

8 Spare parts

The spare parts are provided on a separate list. This can be requested from Jakob AG.

9 Disposal

Please comply with the local regulations on disposal.

Fully drain your gearbox of oil.

Please dispose of even the smallest quantities of oil properly or bring them to a responsible location.

When dismantling, separate material types as far as possible, to allow recycling: Keep metal and plastic parts separate and send for recycling.

Please bear in mind that protecting the environment and re-use of materials benefits everybody.