

# WINCH MA



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## OWNER'S MANUAL

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**MANUAL WINCHES TYPE MA**  
**For load from 300 TO 1.000 KG**



ANGLAIS



### Guarantee

Our manual winches are guaranteed for one year from the date of delivery.

If for a reason outside the control of the vendor, the delivery is delayed, the time lag cannot exceed three months.

If the use (*installation*) of the hoist is delayed, the corresponding extension of the guarantee (a single extension limited to three months) must be requested, and written confirmation obtained.

The vendor undertakes to eliminate all operating errors originating from the concept, the execution, the components or the materials themselves.

The guarantee does not cover normal wear\*, nor the failures resulting from lack of regular and periodic maintenance. It does not cover damage due to a lack of supervision, to false operation or to a bad utilization of the hoists, particularly due to overload conditions.

The guarantee does not apply when there is disassembly, modification or replacement of parts (*mechanical or electrical*) by an unauthorized party or without our prior agreement.

The guarantee only applies for original, factory-installed spare parts, including the ropes.

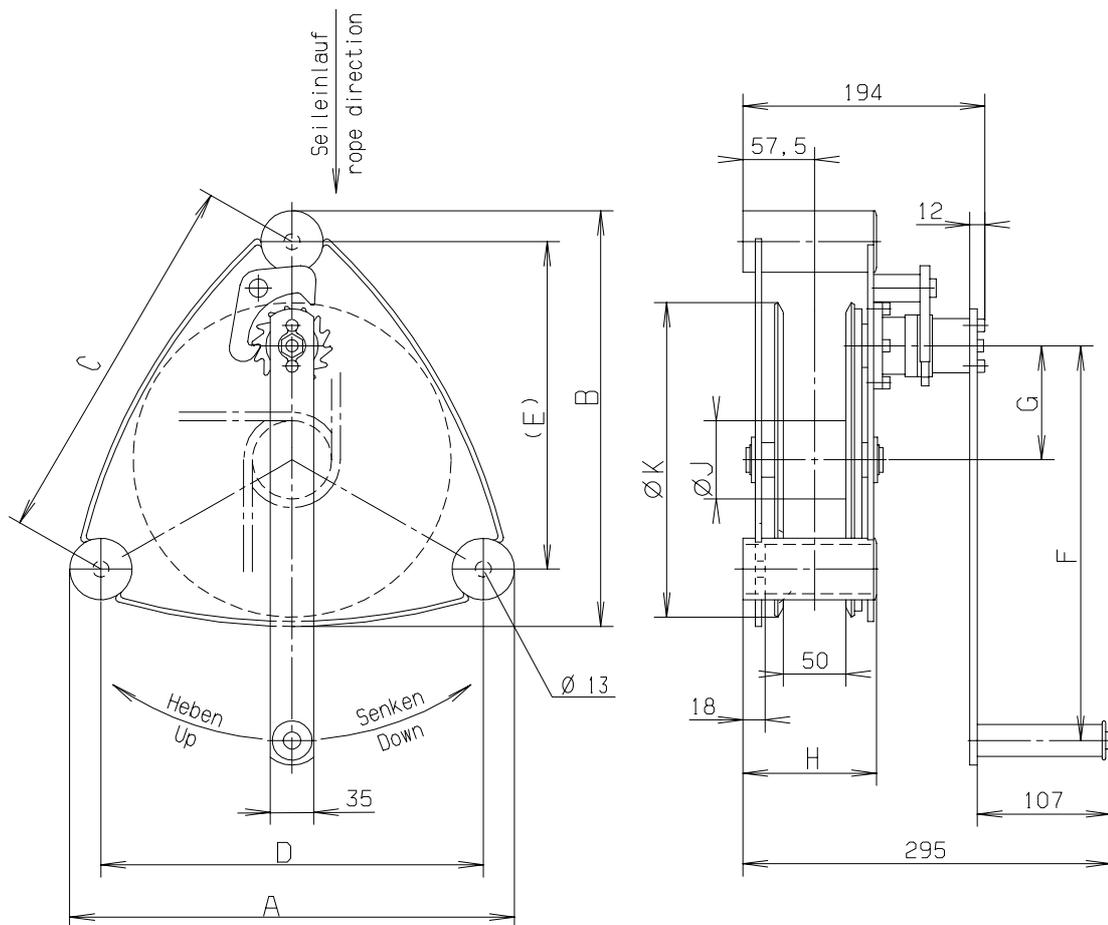
For the duration of the guarantee, the vendor undertakes to replace or repair, free of charge, the parts that are acknowledged to be damaged following examination by a qualified and authorized technical service.

The guarantee excludes any other services or indemnities. The repairs covered by the guarantee are carried out, as a rule, in the workshops of the vendor or authorized agent. When servicing of the equipment is done outside these workshops, the labor costs for disassembly or assembly of these parts are borne by the vendor when these are done exclusively by his staff or by an authorized agent. The replaced parts become the property of the vendor and must be returned to the vendor at his expense.

For components of a relative particular importance that are not manufactured by the vendor and which carry the brand name of specialized manufacturers, the manufacturer's guarantee (which can vary according to the manufacturer) is applicable.

\* The guarantee does not apply for expendable parts defined by the manufacturer :

- Hooks
- Ropes



Type	SWL	A	B	C	D	E	F	G	H	J	K
	[kg]	[mm]	[mm]	[mm]							
MA 1	300	274	262	234	234	203	200	58,6	109,5	63	183
MA 2	500	274	262	234	234	203	250	58,6	109,5	63	183
MA 3	750	357	337	306	306	265	250	92,5	107	63,5	255
MA 4	1000	357	337	306	306	265	320	92,5	107	63,5	255

Before taking into operation, please carefully read this operating instructions!

Observe the safety instructions!

File documentation!

### Destined use

The wire rope winch is a manually operated foot mounted winch for lifting and lowering of loads.

Power operation is not allowed.

The winch is not designed for continuous operation.

Alterations to the winch or fitting of accessories are only allowed with our written approval.

Pay attention to the technical data and functional description!

### Safety Instructions

Operation, installation and maintenance work should only be executed by personnel who are:

- competent
- trained
- familiar with the relevant regulations

Moving of people by the winch or of loads over people is strictly forbidden.

Never touch moving parts.

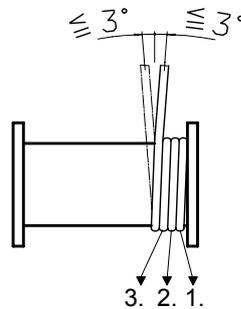
Defects must be repaired immediately by competent trained personnel.

### The load

- ⇒ must not be left suspended without supervision,
- ⇒ must not be allowed to swing

### The rope

- ⇒ should only be used for lifting, lowering or pulling of various loads and must not be used for any other purpose.
- ⇒ at least 3 full turns of rope should remain on the drum when loaded.



- ⇒ max. fleet angle  $3^\circ$  (see picture)
- ⇒ when filled to its capacity the drum flanges must project not less than 1.5 times the diameter of the rope.
- ⇒ examine and service regularly according to DIN 15020
- ⇒ only handle with safety gloves
- ⇒ do not touch the rope inlet



### The Winch

Do not exceed the capacity of each rope layer.

Before taking into operation, a competent person must check:

- the lifting device
- the load bearing parts of the structure
- the carrying medium

Daily examinations:

- brake functions
- condition of the rope and loading device
- load bearing parts of the structure.
- the load carrying medium

### Load attachment device

- ⇒ check it has sufficient carrying capacity
- ⇒ load hooks must have safety catches.
- ⇒ load hooks must be secured to the rope with a solid eye and high pressure rope clamp and tested according to the regulations (included into scope of delivery of VERLINDE ropes)
- ⇒ fix the load correctly



- ⇒ do not use the winch rope as a hitching device.

The winch should be given a thorough examination by a competent person at least once a year.

Always ensure the maintenance intervals are adhered to.

Only use original accessories and spare parts; otherwise safe function is not guaranteed.

### Technical Data

Type		MA 1	MA 2	MA 3	MA 4
FEM Group acc. to DIN 15020/1		1 Em	1 Em	1 Em	1 Em
Load capacity on first layer	[daN]	300	500	750	1000
Load capacity on last layer	[daN]	130	230	270	360
Recommended wire rope - DIN 3060 FE-znk 1770 sZ-spa	ø [mm]	5	6	7	7
Max Wending	[m]	28	20	26	26
Layer max.		10	8	10	10
required crank force	[daN]	13	17	17	18
average lift per full turn of crank	[mm]	57	55	45	45
Weight	[kg]	9,0	9,6	13,0	13,6
securing of load		safety spring locking device			
suitable for ambient temperature		- 20°C ÷ + 40°C			

### Functional Description

The Wire rope winch MC is a drum winch with roller chain drive (Type MC 2 and MC 3) resp. with direct drive (Type MC 1).

The load is automatically held by a spring loaded brake built into the drum.

By changing the crank sockets, the winch can be used for winding the unloaded rope on or off, respectively for small loads in the fast speed. (only Type MC 2 and MC 3)

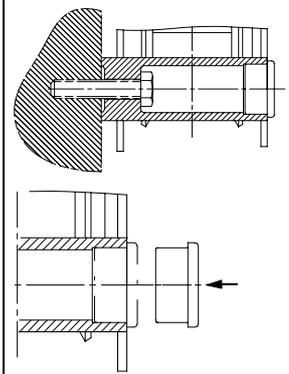
### Mounting Instructions

Mounting:

Mechanical Fixing:

#### ATTENTION:

- the mounting structure must be designed to sustain the max. forces imposed by the winch,
- pay careful attention that the mounting surface is flat and true,
- only fix the winch by means of good quality screws,
- tighten the screws evenly
- secure the screws
- Close holes with plastic parts
- ensure that the crank is free running (crank clearance)



M 12	screw (quality type min. 8.8)
3	number of screws

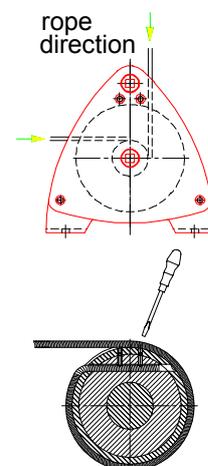
### Wire rope fixing

#### ATTENTION:

With wrong rope coiling the brake is not effective.

Rope coiling has to be effected according to the drawing (direction by choice).

- Insert the rope in consideration of rope winding direction.
- Tighten clamping screws.



For rope selection pay attention to the technical data for the rope (see page 6)

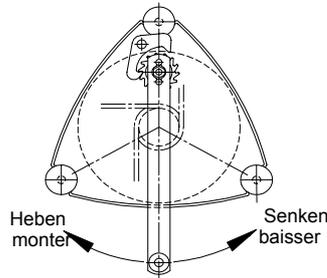
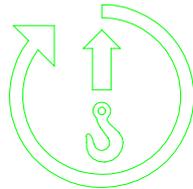
Calculate the rope length in such a way that at least 3 full turns of rope remain on the drum in lowest load position.

### Operating Instructions

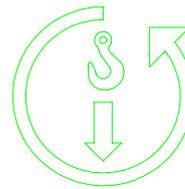
#### Safety Instruction

The winch is only suited for manual operation.

•The load is lifted by turning the crank clockwise.



•The load is lowered by turning the crank counter clockwise.



### Inspection- and Maintenance Instructions

#### Safety Instruction

Before carrying out inspection and maintenance works ensure the winch is unloaded.

Maintenance-, Inspection Works	Inspection intervals
Visual examination of rope-hook (carrying device) Function of the winch Function of brake	daily
Check the safety spring locking device for brake function and wear Check and service rope for wear according to DIN 15020. Check the fixing screws for firm seat	quarterly
Check all parts of the winch for wear and if necessary, replace and grease defect parts. Only use the grease recommended by us. Re-lubrication of the safety spring ratchet only by authorised personnel. <sup>1)</sup> Check Name-plate for legibility Arrange for an examination by a competent person <sup>1)</sup>	annually

1) for example by VERLINDE service department.

The working life of the winch is limited, wearing parts have to be replaced in good time.

Operating material

Recommended lubricant

Recommended lubricant for all lubricating points:

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multipurpose grease acc. to DIN 51825 T1 K 2 K

Waste lubricant has to be disposed acc. to legal regulations!

### Operating failures and their causes

Failure	Cause	Elimination
In unloaded state, it is difficult to turn the crank.	Lubricant in bearing points and chain drive is missing. Dirt or something similar has accumulated in the gearing. Winch was distorted during mounting.	Execute maintenance works.  Check the fixing. Is the mounting surface even, are the screws tightened correctly?
In loaded state, it is very difficult to turn the crank.	Crank is into the fast speed socket Winch is overloaded	Change crank socket Reduce the load
Load is not held.	Wrong coiling of the rope winding. Direction for lifting was not correct. Brake is work out or defect.	Lay the rope correctly Examine brake parts and replace worn out parts.

### Disposal

After having placed out of service, the parts of the hand winch have to be recycled or disposed according to legal regulations!