

Hand spurgear winch

Hand winch MANIBOX GR

Instruction manual ______EN





PRODUCT DEVELOPED AND MANUFACTURED ACCORDING TO STANDARD NF EN 13157

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1 - General warning

This device is governed by European regulations, in particular the machinery directive 2006/42/EC and standard NF EN 13157.

- Before using this winch, with safety of use of the equipment and efficiency in mind, it is vital that you become familiar with this instruction manual and comply with all its recommendations.
- · This instruction manual must be kept available to all operators. The manufacturer will supply additional copies on demand.
- MANIBOX winches are designed for lifting and pulling operations. Please ensure that the operator has read this manual and is qualified to operate
 the machine in the conditions provided for.
- Never use this winch with a load exceeding the maximum working load specified (see paragraph 2.4)
- These winches may not, under any circumstance, be used to lift personnel.
- This device should never be used above people without the load secured by any other method.
- Before each use, the operator must check the good working order of the device, its rope, hook, marking and shoring.
- The manufacturer declines all responsibility for the consequences of using or installing devices against the recommendations of this manual, as well as for the consequences of dismantling, altering or replacing original parts or components with parts or components from other sources without its written agreement.
- It is strictly forbidden to motorise these devices.

2 - Introduction to the devices

MANIBOX are manual lifting and pulling winches built in accordance with current standards and recommendations.

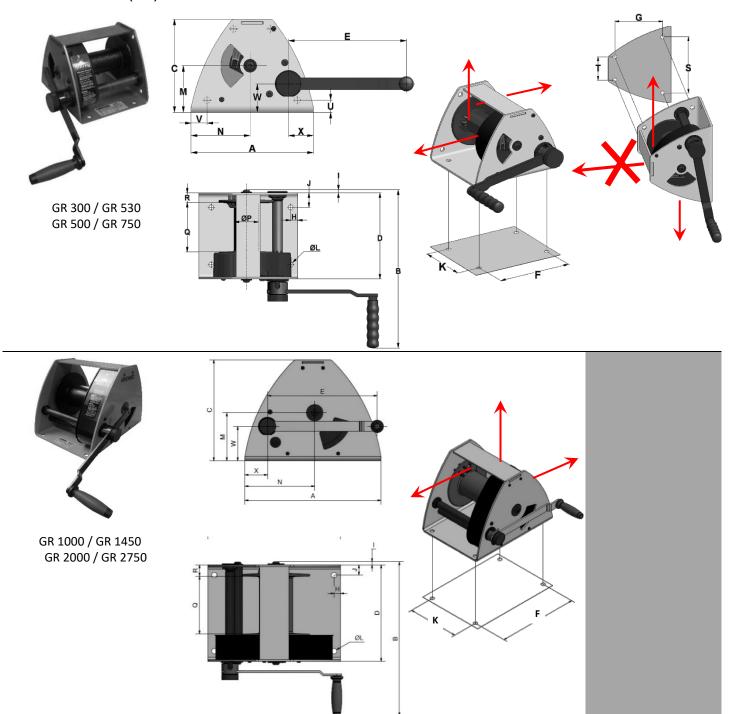
MANIBOX GR: geared winches, 8 capacities available in the range: from 300 kg to 2.75 tonnes.

2.1. Build

- Rigid steel frame
- Drum made from steel and cast iron or a polymer material
- Reduction gear system protected by a metal or plastic cover
- Drum release system
- Automatic brake
- Ergonomic crank assembly with rotary handle. The arm of the crank can be adjusted to minimise the force according to the load.
- Paint and cataphoresis protection, optional galvanised or stainless-steel frame.



2.2. Dimensions (mm)



Model	Α	В	С	D	Е	F	G	Н	I	J	K	ØL	М	Ν	ØР	Q	R	S	Т	U	٧	W	Х
GR 300	249	400	190	217	240	200	145	18	8	37	144	8 Ø 13	95	120	62	124	25	184	76	25	33	58	51
GR 530	249	400	190	217	240	200	145	18	8	37	144	8 Ø 13	95	120	62	124	25	184	76	25	33	58	51
GR 500	249	400	190	217	240	200	145	18	8	37	144	8 Ø 13	95	120	62	124	25	184	76	25	33	58	51
GR 750	249	400	190	217	240	200	145	18	8	37	144	8 Ø 13	95	120	62	124	25	184	76	25	33	58	51
GR 1000	410	485	305	300	340	370	-	20	10	32	236	4 Ø 17	145	200	103	180	35	-	-	-	-	104	68
GR 1450	410	485	305	300	340	370	-	20	10	32	236	4 Ø 17	145	200	103	180	35	-	-	-	-	104	68
GR 2000	510	585	360	400	340	440	-	35	11	38	325	4 Ø 21	150	187	121	238	47	-	-	-	-	270	165
GR 2750	510	585	360	400	340	440	-	35	11	38	325	4 Ø 21	150	187	121	238	47	-	-	-	-	270	165



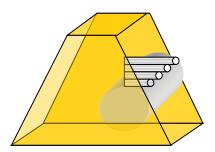
2.3. Technical features of the different models

Model	Capacity on the 1rst layer (kg)	Capacity on the last layer (kg)	Wire rope capacity at the 1rst layer (m)	Max. rope capacity (m)	Wire rope diameter Ø mm	Crank force (kg)	Lift per crank revolution (mm)	Weight (without rope) (kg)
GR 300	500	300	4	38	5	12.5	30.5	15
GR 530	530	530	4	4	6	12.5	30.5	15
GR 500	750	500	3	18	7	19	31.5	15
GR 750	750	750	3	3	7	19	31.5	15
GR 1000	1450	1000	5,5	30	9	14.5	16	44
GR 1450	1450	1450	5	5	10	14.5	16	44
GR 2000	2750	2000	6	25	13	16.5	9.5	83
GR 2750	2750	2750	6	6	13	16.5	9.5	83

The rope diameter provided above refers to the capacity on the last layer.

Caution! it is compulsory to check that the resistance factor of the wire rope complies with the lifted load (factor 5)

2.4. Maximum working loads according to the layer of rope used



Model	1st layer	2nd layer	3rd layer	4th layer	5th layer	6th layer
GR 300	530	450	400	350	320	300
GR 530	530				_	
GR 500	750	650	560	500		
GR 750	750					
GR 1000	1450	1250	1100	1000		
GR 1450	1450			_		
GR 2000	2750	2300	2000			
GR 2750	2750					

2.5. Accessories

The MANIBOX GR is supplied with ropes and accessories.

The pulleys and the blocks used with these winches must comply with standard EN 13157.

2.6. Operation

When operating the crank, depending on the direction of rotation, the load goes up or down. When no more force is exerted on the crank, the brake comes into action and maintains the load in position. There must be sufficient force on the machine.

Table of minimum forces:

GR 300	GR 500	GR 1000	GR 2000
GR 530	GR 750	GR 1450	GR 2750
15 kg	25 ka	50 ka	100 kg

3 - Handling - Storage

Above 1,000 kg, to handle and position a winch, place a sling around the drum. This causes the device to tilt, allowing it to be easily and safely handled.

It is advisable to store this equipment to protect it from bad weather.

4 - Use, assembly and commissioning

Please observe the following precautions.



4.1. Fixing

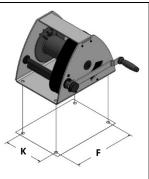














When the winch is wall-mounted, add a washer (see below) between the frame and the wall for each screw.

When the winch is fixed on a bracket, only the side cable outlets should be used

Calculate and check that the fixing supports have enough strength to easily withstand the loads to be lifted or pulled.

Length of 8 mm for GR 300-GR 530/GR 500-GR 750.

Fixing screws:

	Floor-mounting	Wall-mounting
GR 300 / GR 530 / GR 500 / GR 750	4 screws Ø 12 mm	4 screws Ø 12 mm + 4x3 washers Ø 12 mm
GR 1000 / GR 1450	4 screws Ø 16 mm	
GR 2000 / GR 2750	4 screws Ø 20 mm	

All these screws must be at least 6.8 class.

4.2. Rope

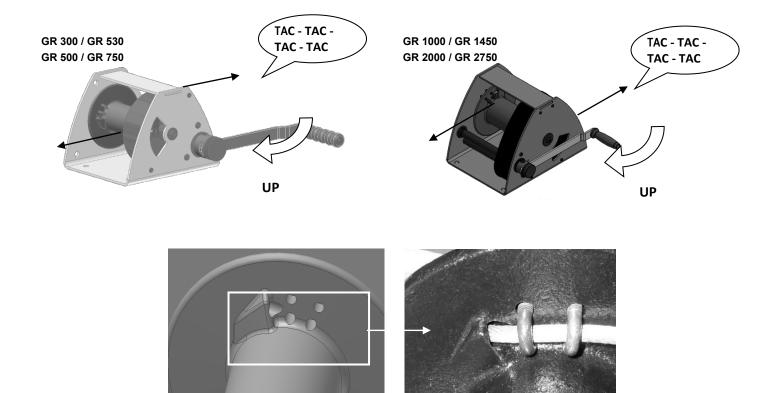
Models	Ø mm	Max. capacity (m)	Number of layers
GR 300	5	38	6
GR 530	6	4	1
GR 500	7	18	4
GR 750	7	3	11

Models	Ø mm	Max. capacity (m)	Number of layers
GR 1000	9	30	4
GR 1450	10	5	1
GR 2000	13	25	3
GR 2750	13	6	1

4.3. Installing the rope

Strictly observe the rope winding direction. To lift the load, turn the crank clockwise: a click will be heard. To lower the load, turn the crank in the opposite direction.





DANGER! If the rope is not wound in the right direction, the brake will not operate

In the event of an error, a safety device is provided to prevent incorrect winding of the rope: the operator gets the impression of turning with no load. In this case, remove the rope and attach it in the opposite direction.

Caution: only for 1000, 1450, 2000 and 2750 kg, it can be harmful to turn the crank in the opposite direction to lifting

4.4. Disengagement







CAUTION! Never disengage a loaded winch!

Before disengaging, make sure no load is connected to the rope. The rope should not be under tension.

5 - Maintenance

Winches are delivered ready to be used.

When using for the first time, lubrication is not required as this has been performed in the factory. Nor is any specific check required

A periodic maintenance check is required once a year.

Regularly grease the gears with EP2-grade grease for open gears.

Regularly and before each use: check the condition of the rope, hook and its safety catch. If the manufacturer does not supply the rope and hook with the device, check that the rope and hook used guarantee a degree of safety corresponding to break factor 5.

Periodically check the correct operation of the brake (static tests: rated load + 50 %)



Regularly check the wear of the brake linings. When they are no longer visible, they need to be replaced.







Automatically locking brake

The brake will lock automatically with the following minimum loads:

GR 300 / GR 530	GR 500 / GR 750	GR 1000 / GR 1450	GR 2000 / GR 2750
15 kg	25 kg	50 kg	100 kg

6 - Prohibitions for use

Before using the winch, check that there is no risk of overloading due to: adherence to the floor, suction, jamming, etc. Take warning against the following improper uses or handling operations:

It is prohibited to:

- Lift loads exceeding the rated load specified on the plate of the device:
- Unwind the drum completely (keep 2 to 3 extra turns);
- Pull sideways;
- Swing the load;
- Use the winch to lift personnel;
- Stand under the load;
- Use ropes with a diameter and texture not complying with the specifications of this manual (factor 5);
- Use damaged or spliced ropes;
- Use hooks without catches, not suitable for the loads specified on the device or in bad condition;
- Insert objects into the moving parts;

- Work on the device when loaded;
- Release the drum when loaded;
- Allow the load to fall freely;
- Motorise the device
- Use the rope of the device as a sling;
- Use handles different from the original ones;
- Use the devices for operations other than from those for which they are designed;
- Use the winch as a fall-prevention device, regardless of the height of the fall and the load applied.
- Use parts or components other than the manufacturer's original parts or components;
- Reeve, positioning the fixed point on the winch.

7 - User precautions

- Long descents can cause the braking system to overheat and damage it. It is strongly recommended to respect a stopping time of several minutes every 5 metres during the lowering stage. This recommendation mainly affects the 1000, 1450, 2000 and 2750 kg models.
- The operating temperature must be comprised between -10°C and +50°C.
- These winches have been designed for operation in a normal
- environment. If they are used in an aggressive environment (saline or chemical atmosphere, etc), they must be subject to special attention or a request for information from the manufacturer.
- These winches must be operated frequently, even with no load, especially when used in harsh environments. Extended inactivity can risk damaging the braking system (brake jammed).
- You are strongly advised not to handle the cable without wearing protective gloves.

8 - Statutory, compulsory checks by the user

This equipment has been designed to withstand the following tests:

- Dynamic proof test with factor 1.1.
- Static proof test with factor 1.5.

A periodic maintenance check is required once a year.

Check the wear of the brake linings regularly.

The user must keep a safety log. In compliance with the regulations, the user must keep an inspection book, where all actions and inspections conducted on the device shall be recorded (FEM rule 9755).



9 - Putting out of operation

When the equipment is in a state of decay and likely to create risks, the user is obliged to dispose of the device, i.e. to put it out of operation and dismantle it if required.

10 - Frequently asked questions

Question	Cause	Solution
The drum does not turn when the handle is turned	The winch is disengaged	Make sure the disengaging lever is in the engaged position. See paragraph 4.4
	The cable is installed in the wrong direction and the security device is triggered.	Make sure the cable is installed in the right direction. See paragraph 4.3
The disengaging lever is too stiff to move it	The winch is still loaded or the cable is simply under tension.	Check that no loads are applied to the winch and that there is no tension on the cable. See paragraph 4.4
Excessive force needs to be applied to the handle	The load to be lifted or pulled is too heavy	Set the load down carefully and check the real weight to be lifted or pulled. The load may not exceed the limit force of the winch. See paragraph 2.4
The winch vibrates or "whistles"	The brake is overheating. This phenomenon only occurs in the cable unwinding direction. See paragraph 7	Allow it to cool for at least 5 minutes.
	The brake linings are too worn. See paragraph 8	The winch needs service.
	The gears have lost their lubrication.	Lubricate the gears. See paragraph 5

11 - Specimen of declaration of conformity



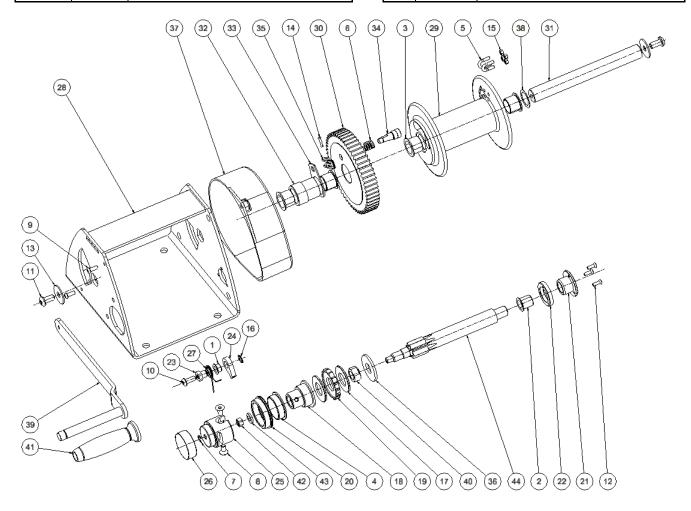


12 - Spare parts

GR 300 kg-GR 530kg & GR 500 kg-GR 750kg

Pon	N°	Description
Rep.	IN	Description
1	2760	GFM-1214-09 ring
2	2762	GFM-1820-22 ring
3	2765	GFM-2528-21 ring
4	2766	GFM 4044-14 ring
5	2775	Ø5 to 7 stainless steel able clamp
6	2779	Disengaging detent spring
7	13505	7-8 Type E ring
8	13626	TFHC screw M8x16 ZN
9	13640	TBHC screw M6x16 ZN
10	13643	TBHC screw M8x20 ZN
11	13645	TBHC screw M10x20 ZN
12	13647	TFHC screw M5 x16 ZN
13	13658	LLU 10 washer
14	13659	3.2x18 Alu Rivet
15	13666	H M5 Inox nut
16	21045	E12 spring retaining ring
17	22758	Lock washer
18	22908	Locknut
19	22909	Machined steel ratchet
20	22910	Front bearing
21	22911	Rear bearing GR
22	22912	Tightening crown

Rep.	N°	Description
23	22914	Link pin
24	22915	Catch
25	22916	Crank head
26	22917	Lock button
27	22919	Detent spring GR
28	22921	GR300-500 frame
29	22922	GR300-500 drum
30	22924	55-tooth gear
31	22925	GR300-500 Drum shaft
32	22926	GR300-500 Spacer hub
33	22927	GR-VS 500 Plate
34	22928	Disengaging pin
35	22929	Disengaging lever
36	22930	Brake support washer N°2
37	22931	Cover
38	22932	26x35x05 spacer
39	22933	Short crank sub-assembly
40	22939	Lock ring
41	23216	Grip
42	24444	M10 G hexa 13 nut
43	24445	Ø19xØ10.5 thickness 3 washer
44	24447	8-tooth shaft pinion

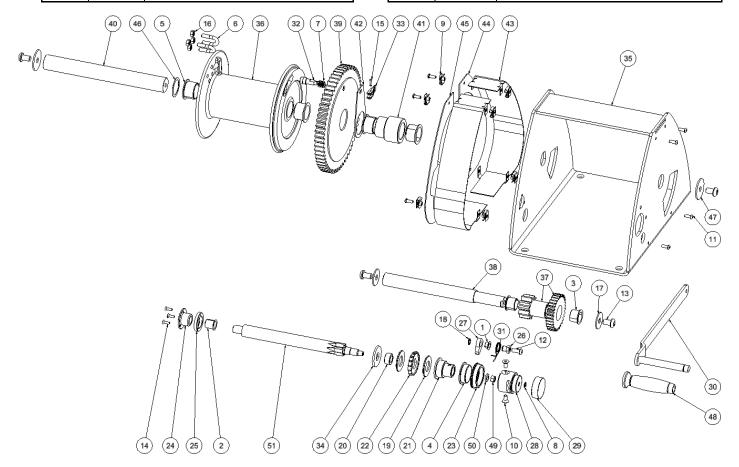




GR 1000 kg-GR 1450 kg

Rep.	N°	Description
1	2760	GFM-1214-09 ring
2	2762	GFM-1820-22 ring
3	2765	GFM-2528-21 ring
4	2766	GFM 4044-14 ring
5	2768	GFM-3539-26 ring
6	2774	Ø9 to 11.5 lnox cable clamp
7	2779	Disengaging detent spring
8	13505	7-8 type E ring
9	13622	M6 spring nut
10	13626	TFHC M8x16 ZN screw
11	13640	TBHC M6x16 screw
12	13643	TBHC M8x20 screw
13	13646	TBHC M12x20 ZN screw
14	13647	TFHC M5 x 16 ZN screw
15	13659	3.2x18 Alu rivet
16	13665	H M8 Inox nut
17	13670	LLU 12 ZN washer
18	21045	E12 spring retaining ring
19	22758	Lock washer
20	22759	Steel Lock ring
21	22908	Locknut
22	22909	Machined steel ratchet
23	22910	Front bearing
24	22911	Rear bearing GR
25	22912	Tightening crown
26	22914	Link pin

Rep.	N°	Description
27	22915	Catch
28	22916	Crank head
29	22917	Lock button
30	22918	long crank
31	22919	Detent spring GR
32	22928	Disengaging pin
33	22929	Disengaging lever
34	22930	Brake support washer N°2
35	22941	GR 1000 frame
36	22942	GR 1000 drum
37	22944	Feed wheel sub-assembly
38	22947	Intermediate shaft
39	22948	63-tooth gear
40	22949	Drum shaft
41	22950	Gear hub GR 1000
42	22951	Disengaging plate
43	22952	Half cover
44	22953	Flat sheet cover N°1
45	22954	Flat sheet cover N°2
46	22955	36x47x05 spacer
47	22978	12x50x3 washer
48	23216	Grip
49	24444	M10 G hexa 13 nut
50	24445	Ø19 x Ø10.5 thickness 3 washer
51	24448	8-tooth shaft pinion





GR 2000 kg-GR 2750 kg

Rep.	N°	Description
1	2760	GFM-1214-09 ring
2	2762	GFM-1820-22 ring
3	2766	GFM 4044-14 ring
4	2767	GFM-3539-16 ring
5	2768	GFM-3539-26 ring
6	2770	GFM-5055-40 ring
7	2778	Stainless steel cable clamp Ø13
8	2779	Disengaging detent spring
9	13228	8x7x20 FA Key
10	13505	7144-7 ring
11	13622	M6 spring nut
12	13626	TFHC M8x16 ZN screw
13	13640	TBHC M6x16 screw
14	13644	TBHC M8x25 ZN screw
15	13646	TBHC M12x20 ZN screw
16	13647	TFHC M5 x16 ZN screw
17	13659	3.2x18 Alu Rivet
18	13668	H M10 stainless steel nut
19	21045	12x1 external retaining ring
20	22779	Link pin
21	22793	Lock washer
22	22794	GR 2000 ratchet
23	22797	Front bearing
24	22798	Locknut
25	22799	Brake washer
26	22911	Rear bearing GR
27	22912	Tightening crown

Rep.	N°	Description
28	22915	catch
29	22916	Crank head
30	22917	Lock button
31	22918	Long crank
32	22919	Detent spring GR
33	22928	Disengaging pin
34	22929	Disengaging lever
35	22961	GR 2000 frame
36	22962	SE drum GR 2000
37	22964	79-tooth gear
38	22965	SE Disengaging flange pinion
39	22968	Intermediate shaft
40	22969	Intermediate hub
41	22970	53-tooth gear
42	22971	GR 2000 drum shaft
43	22972	Gear hub
44	22973	Plate
45	22974	Piles
46	22975	Half cover
47	22976	Flat sheet cover N°1
48	22977	Flat sheet cover N°2
49	22978	12x50x3 washer
50	22979	12x55x4 washer
51	23216	Grip
52	24444	M10 G hexa 13 nut
53	24445	Ø19 x Ø10.5 thickness 3 washer
54	24449	8-tooth shaft pinion

