

DICTAMAT 50 KW

Technical Manual

You can find the current version of our manual on our website under «Downloads»:
<https://en.dictator.de/products/door-closing-solutions/door-closers/sliding-door-closer-dictamat50/kp-kw/>

A) Safety Instructions / Components Included

1) Safety Instructions

When installing and using the DICTAMAT 50 KW with pull rope make sure to observe all information and advice of this manual. During the installation we recommend to wear protective gloves to prevent any risk of getting hurt by sheet edges.

The casing of the spring rope pulley may never be opened as the released spring can cause major injuries. If the spring rope pulley for some reason no longer works properly the complete device has to be replaced!

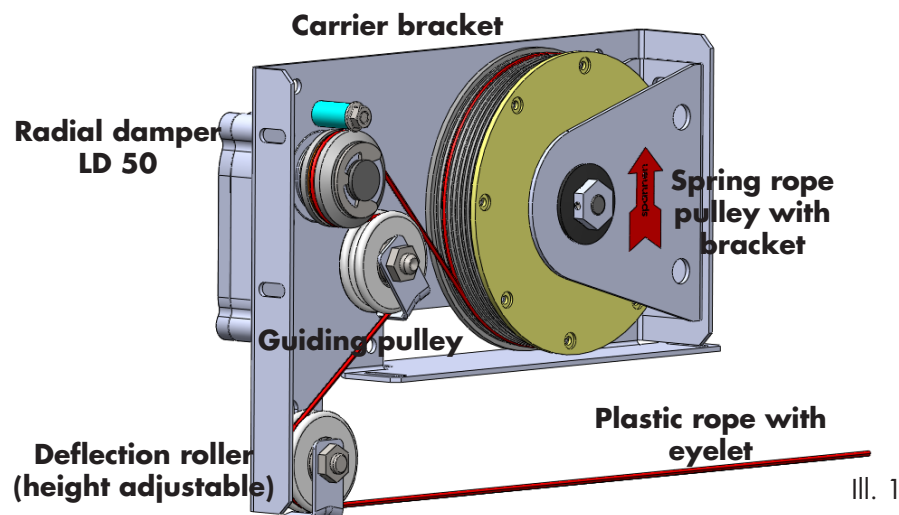
It has also to be assured that the spring rope pulley and the radial damper are protected by a protection cover to prevent fingers getting trapped. Furthermore the rope may not get in touch with fat or oil as otherwise the rope may slip.

The closing speed has to be adjusted on the radial damper so that the door can easily be stopped by hand in every position, making sure nobody will be put in danger.

IMPORTANT: Both components of the compact unit may never be installed without the carrier bracket or with altered positions, as this might cause malfunction by slack rope.

2) Components Included (Ill. 1)

DICTAMAT 50 KW consisting of the carrier bracket with
spring rope pulley with 2 m of plastic rope with eyelet
guiding pulley with rope coming-off prevention device
radial damper LD 50 with rope pulley
deflection roller (height adjustable)



Ill. 1

C) Mounting of the DICTAMAT 50 KW

1) Determining the Mounting Position

The DICTAMAT 50 KW is a compact unit with single pull rope and carrier bracket for mounting on top of the rail. Usually it is mounted on the side of the rail where the door is closed as then the pull rope can directly be fixed to the door leaf. The DICTAMAT 50 KW can be used without changing for doors closing to the right or left.



DICTAMAT 50 KW
 mounted at the left, door closes to the left



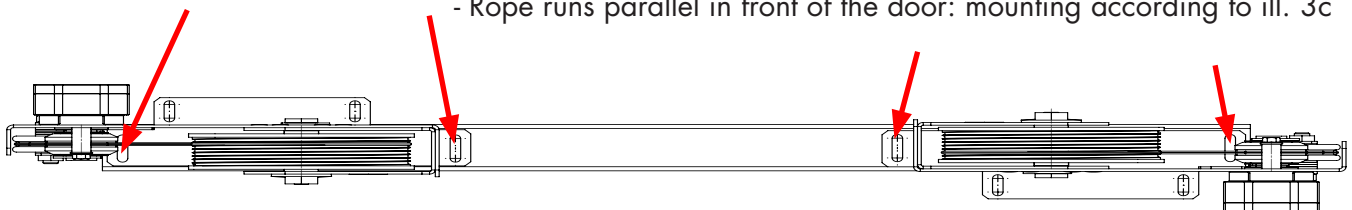
DICTAMAT 50 KW
 mounted at the right, door closes to the right



Ill. 3a

For the fixing you have to take into consideration where the rope shall run. This decides which of the oblong holes of the carrier bracket (marked by the red arrows) have to be used for the fixing (see ill. 3a and the following illustrations).

- Rope runs below the rail: mounting according to ill. 3b
- Rope runs parallel in front of the door: mounting according to ill. 3c



Oblong fixing holes

Ill. 3b



Ill. 3c

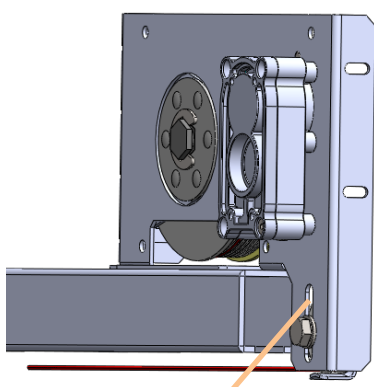
C) Mounting of the DICTAMAT 50 KW - continuation

2) Mounting

The DICTAMAT 50 KW is fixed to the rail via the oblong holes described on the previous page. For further stabilization the carrier bracket of the DICTAMAT 50 KW can additionally be fixed with the oblong holes ③ according to ill. 2.

ATTENTION: Do not yet tighten the screws completely, only after the Kevlar rope has been fixed.

3) Adjusting the Deflection Roller



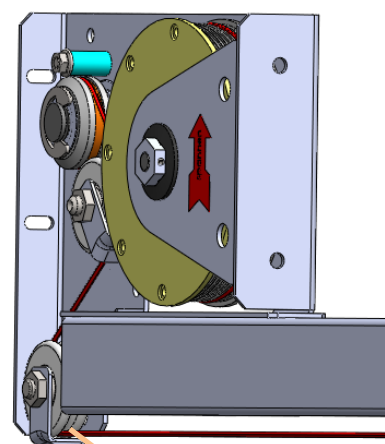
Oblong hole for adjusting the height of the deflection roller

Ill. 4b

The height of the pull rope is determined by means of the deflection roller. This makes the DICTAMAT 50 KW independent of the used rail.

The oblong hole allows for an 30 mm adjusting range.

IMPORTANT: the deflection roller has to be positioned in a way that the pull rope runs horizontally! The deflection roller has to move freely and may not touch the rope coming-off prevention device or the rail.



Deflection roller

Ill. 4a

4) Fixing the Kevlar Rope to the Door

For an easy fixing to the door the Kevlar rope of the spring rope pulley is provided with an eyelet for M5 screws. The eyelet can be fixed either to the wheel hanger or directly to the door leaf. The rope should run as horizontally as possible and may not chafe on sharp edges.

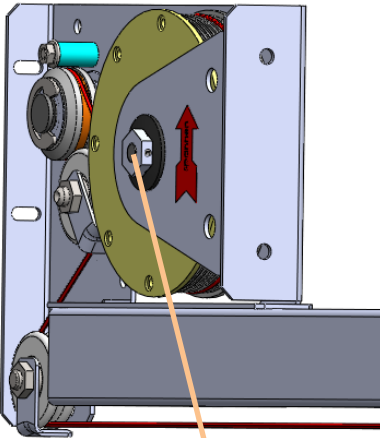
If necessary the position of the DICTAMAT 50 KW has to be adjusted.

As soon as the DICTAMAT 50 KW has been positioned correctly all fixing screws are finally tightened.

ATTENTION: In case the Kevlar rope has accidentally disengaged from the guiding pulleys of the DICTAMAT 50, it is compulsory to guide the rope corresponding to the illustration 4a and to make sure it runs beneath the rope coming-off prevention device!

D) Adjusting the Closing Force and Speed

1) Adjusting the Closing Force on the Spring Rope Pulley



Ill. 5 Tensioning screw of the spring rope pulley

Open the door completely (max. opening 1.5 m) - there must remain min. 1.5 loops of rope on the spring rope pulley. The spring is tensioned with the tensioning screw SW17 that is accessible from both sides. The correct sense for the tensioning is indicated by the red arrows "Spannen" (see ill. 5). Maximum pretension: depending on the type of the spring rope pulley (see table below)!

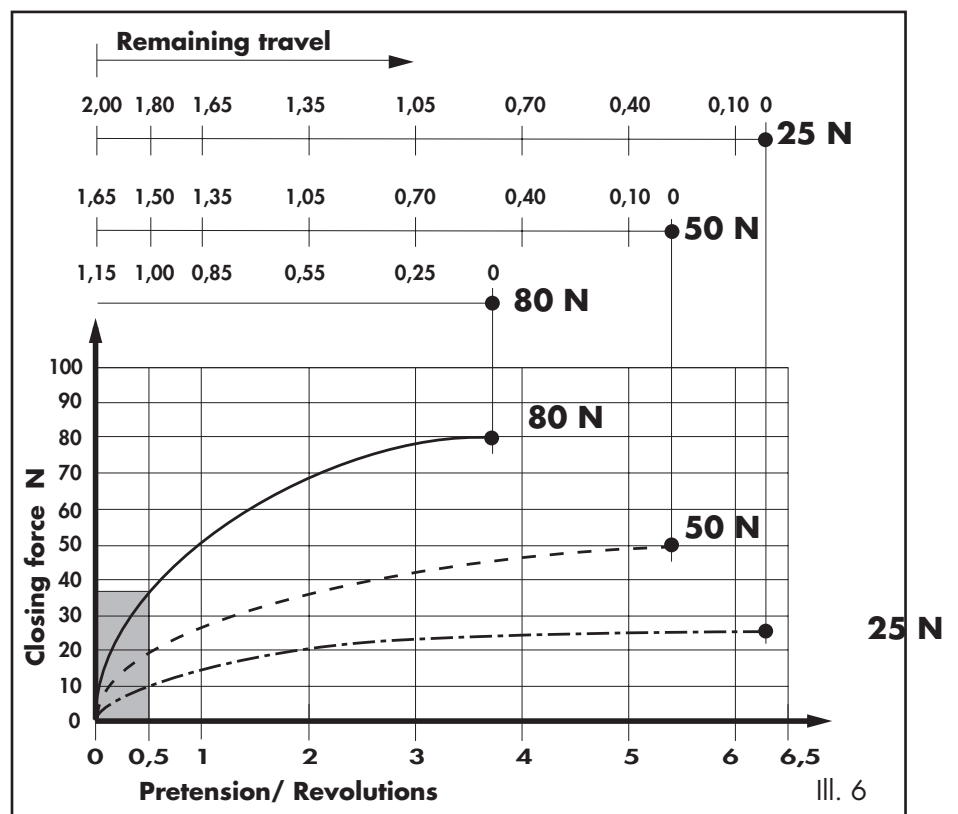
Reducing the pretension: if the spring rope pulley has been tensioned too much, the pretension can be reduced by turning the tensioning screw against the direction of the arrows.

Force needed for tensioning/detensioning the spring:

25 N: about 12 Nm, 50 N: about 15 Nm, 80 N: about 17 Nm

25 N		50 N		80 N	
Travel	Rev.	Travel	Rev.	Travel	Rev.
1800 mm	0.5	1500 mm	0.5	1000 mm	0.5
1650 mm	1	1350 mm	1	850 mm	1
1350 mm	2	1050 mm	2	550 mm	2
1050 mm	3	730 mm	3		
700 mm	4	400 mm	4		
400 mm	5				

The diagram (ill. 6) indicates the closing force of the spring in relation to the pretension and the door width.



D) Adjusting the Closing Force and Speed (cont.)

2) Adjusting the Closing Speed

In order to adjust the closing speed open the door completely.

Now adjust the closing speed during the closing of the door by turning the adjustment screw of the radial damper (Allan key 5.5 mm or slotted screw driver) (see ill. 7).

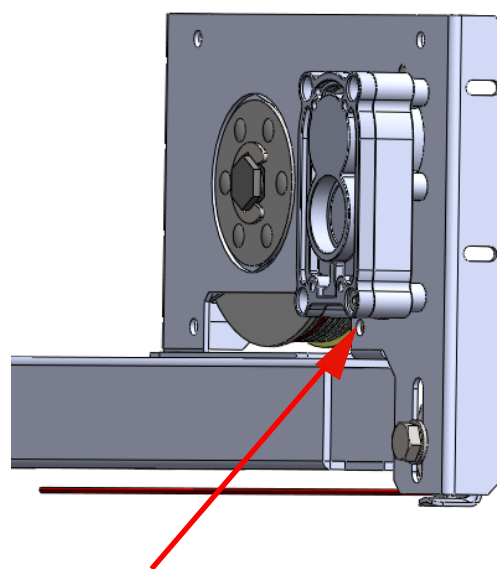
Turning clockwise:

reduces the closing speed

Turning anticlockwise:

increases the closing speed

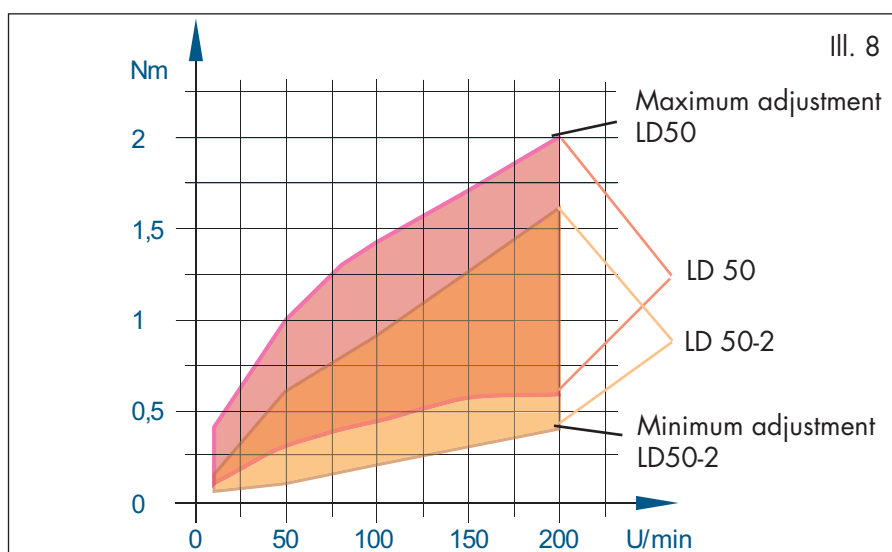
Make sure that the spring closes the door from every position, also the not completely opened door. If necessary, increase the pretension (see point 1. **IMPORTANT:** Pretension the spring only when the door is completely opened!)



Adjustment screw for the closing speed

Ill. 7

Damping Force

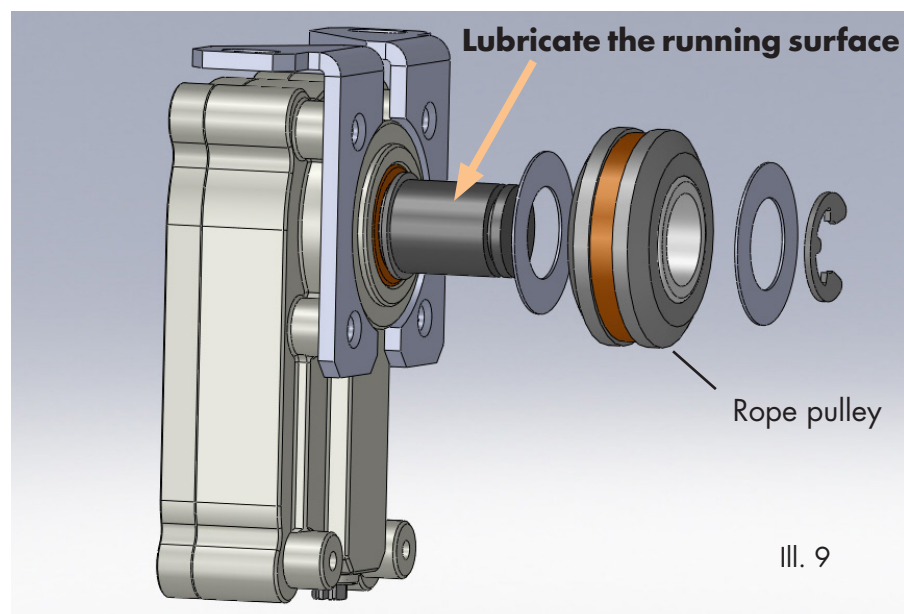


Ill. 8

E) Maintenance, Servicing

Annually or at the latest after 30.000 movements:

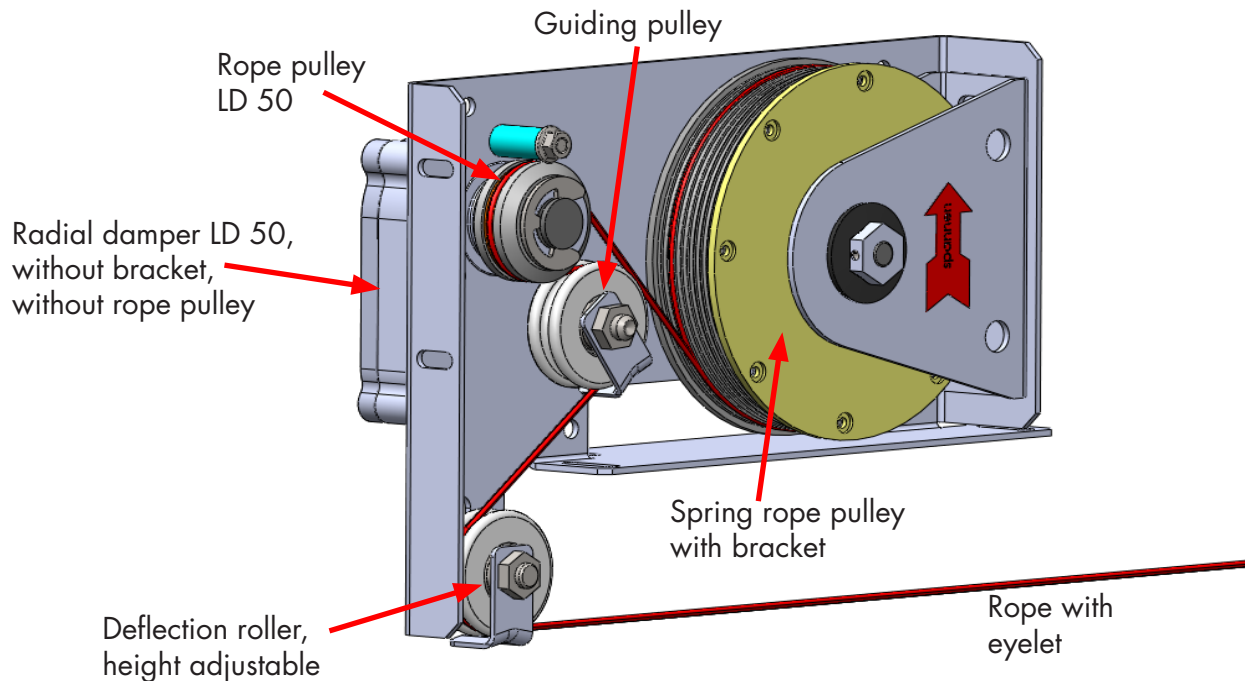
1. Check the door for damages and its smooth operation.
2. Check the fittings for damages and wearing: rail, wheel hanger, door handle etc.
3. Check the secure fixing of all door and operator fittings.
4. Check the complete rope and the lining of the rope pulley for damages and wearing.
5. Check the freewheel of the rope pulley for smooth operation and running noises.
6. Lubricate just the running surface of the freewheel of the rope pulley with vaseline (ill. 9). For this purpose reduce the rope tension, partly pull off the rope pulley and put some vaseline on the shaft.



7. Check the rope tension. The rope may not slip on the rope pulley. If necessary, retension.
8. Check the closing speed and force and, if necessary, adjust it. Too fast doors represent a risk of getting injured.
9. All damaged and worn parts have to be replaced as fast as possible by original spare parts.

F) List of Spare Parts

Below you will find the individual spare parts and their part numbers.



	Part no.
Radial damper LD 50, without bracket, without rope pulley	244045
Rope pulley LD 50	205465
Guiding pulley, without screws	205193
Deflection roller, without accessories	205193
Plastic rope with eyelet, 2.5 m	700058
Plastic rope with eyelet, 3.5 m	700059
Spring rope pulley 25 N with sliding hub, bracket zinc-plated	070102
Spring rope pulley 50 N with sliding hub, bracket zinc-plated	070093
Spring rope pulley 80 N with sliding hub, bracket zinc-plated	070094
Spring rope pulley 25 N with sliding hub, bracket AISI 304	070103
Spring rope pulley 50 N with sliding hub, bracket AISI 304	070098
Spring rope pulley 80 N with sliding hub, bracket AISI 304	070099