

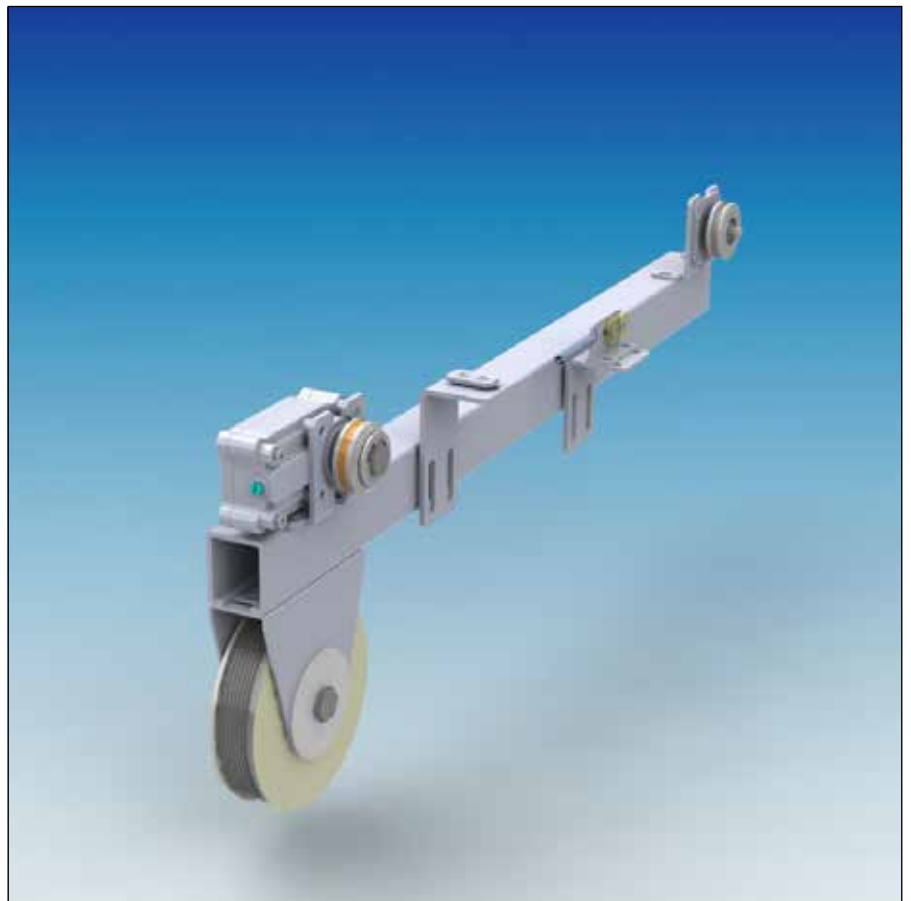
## Sliding Door Closer DICTAMAT 50

DICTATOR provides for **small and middle sliding doors** a very flexible **mechanical** closing system, the **DICTAMAT 50**. The series joins a spring rope pulley and the patented lamellar radial damper LD. Together they make sure sliding doors close reliably - at a controlled speed.

### Standard versions:

- the all-purpose **modular system BK**. It is available either as a standard kit or as an individual combination of the spring rope pulley and the radial damper required by the particular application.
- the **compact units** which are subject to certain restrictions regarding their possible applications.
- **model WS with tensioned steel wire drive rope**. Of this are available three versions: as **normal closing device**, **with additional locking device** and as **freewheel version** (in particular for fire protection doors). In this case the door usually is operated manually. In case of an alarm, however, the freewheel device makes sure the door is always reliably closed.

Besides this, with the DICTAMAT 50 series you can design innumerable **special solutions for special applications**.



### Technical Data

Closing force	25 N, 50 N, 80 N, 100 N (standard versions)
Working travel	max. 4 m (depending on pretension and strength of spring)
Door weight	10 - 200 kg
Damping force	max. 2 Nm (radial damper LD 50), max. 5 Nm (LD 100)
Material	see information on the pages about the different versions some are available completely in rustless material



## DICTAMAT 50 - Overview Versions

The DICTAMAT 50 has been designed as closing device for sliding doors. It assures their reliable closing at a closing speed adapted exactly to the requirements on site.

How the different components are arranged depends on the version and the mounting situation. We would be happy to assist you in choosing the best solution for your application.

The DICTAMAT 50 can be mounted on the most different rail systems. If required, it is also possible to supply specially adapted mounting accessories.

## Versions

### DICTAMAT 50 BK - modular system (see next page et sqq.)

The DICTAMAT 50 BK modular system is the most flexible and universally usable version of the DICTAMAT 50.

It can simultaneously move both leaves of double-leaf sliding doors. Furthermore it facilitates, due to its modular structure, to realize space saving solutions.

A revolving rope or a revolving toothed belt always provides a secure and reliable function. Therefore, the single components of this version can be installed separately, without running the danger of the pull rope to slacken.

Spring rope pulley, radial damper and idler pulley are supplied with the mounting accessories that facilitate to fix them directly to the rail or to the ceiling. On demand, there are also available special mounting accessories for the fixing to the wall.

### DICTAMAT 50 - compact units (see page 02.089.00 et sqq.)

For certain applications the DICTAMAT 50 is also available as compact unit. Here all the required components are combined to a unit. The compact units may only be used on doors in buildings. They are not fit for being used on ships or in trains where different angles of inclination occur. In case of the closing being manipulated (the door is also pushed close manually), the so-called slack rope may happen.

- **DICTAMAT 50 KP:** compact unit with carrier plate for mounting below the rail, with single pull rope. For single-leaf doors only.

- **DICTAMAT 50 KW:** compact unit with carrier bracket for mounting on top of the rail, with single pull rope. For single-leaf doors only.

### DICTAMAT 50 WS - tensioned wire rope (see page 02.093.00 et sqq.)

The DICTAMAT 50 WS is also a modular system. Instead of a revolving rope or toothed belt, this system uses a tensioned steel wire drive rope. This special rope is guided over the pulley wheel of the lamellar radial damper, which in turn controls the closing speed. The rope pulley is fitted with a special cover to ensure that the drive rope remains properly engaged.

If the sliding door is required to close after every operation the Spring Rope Pulley and the Radial Damper are fitted directly to the door.

The DICTAMAT 50 WS-MFL is the ideal solution for Fire and Smoke protection doors which need to close automatically in the event of a fire. It is a 'freewheel' version which provides the flexibility of allowing the sliding door to be used as normal, whilst ensuring that the door will close automatically in the event of a fire, or when required. To achieve this the radial damper is not fitted directly to the door, instead it is installed in a specially designed carrier casing which runs along a tensioned wire rope adjacent to the door. The spring rope pulley is attached to the carrier casing to provide the closing force. In normal operation the carrier casing is held in the open position by an electromagnet and does not act upon the door. Under normal conditions the door is moved by hand and will remain stationary at any desired position. In the event of an alarm, or when triggered by a central control system, the magnet releases the carrier casing. The spring rope pulley will then pull the carrier casing in the closing direction, collecting the door from whatever position it has been left at. Closing speed is controlled by the radial damper. At the moment this system has not been tested as there doesn't exist a relevant standard. The components of the DICTAMAT 50 WS-MFL, however, have been approved for their use on smoke and fire protection doors.



## DICTAMAT 50 BK - The Flexible Modular System Basic Set-Up

In the DICTAMAT 50 BK modular system a revolving rope or toothed belt controls the closing speed and the continuous closing force. Therefore the DICTAMAT 50 BK is the ideal solution for highly frequented doors, with varying users, in trains, on ships etc.

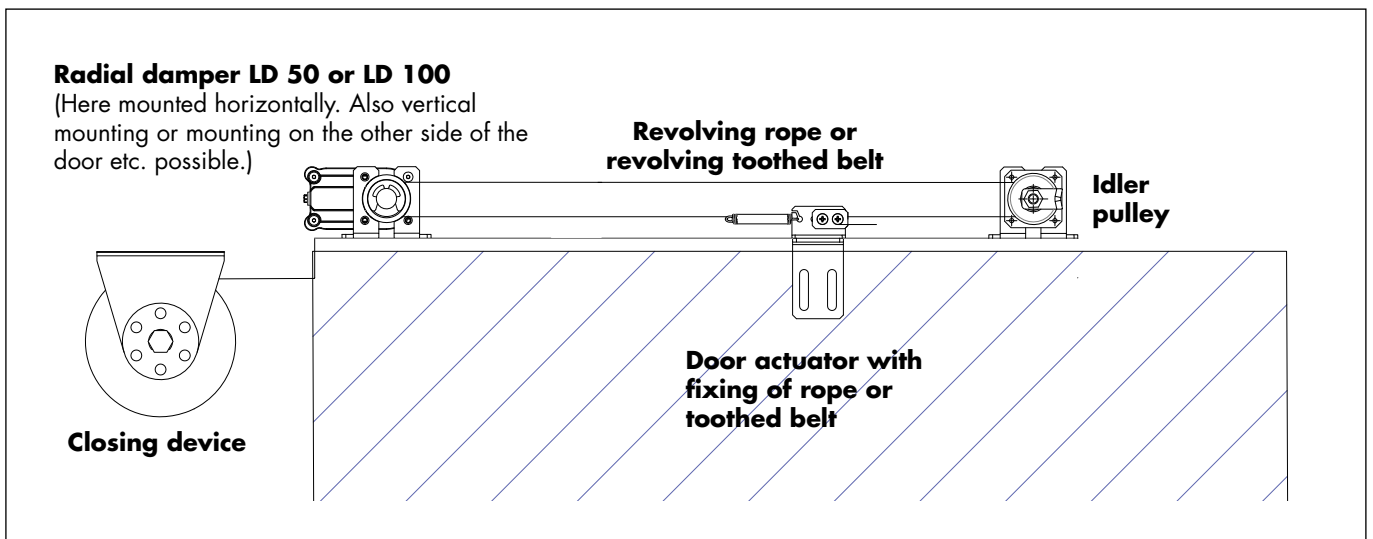
Due to its modular structure it is also very well suited in case of space problems as the single components can be mounted in a flexible way.

The DICTAMAT 50 BK is available as complete kits or the single components are combined individually according to the application.

### Structure DICTAMAT 50 BK

The following drawing shows the components of the DICTAMAT 50 BK. They can be combined at will. For the most common applications standard kits have been prepared. When they cannot be used, the components can be combined individually.

Depending on the available space, the components of the modular system can be mounted in different positions. For designers there are nearly no limits to develop own object specific solutions. Of course, DICTATOR will be happy to assist you in realizing your ideas.



### Components

	Standard kits	Options for special solutions
<b>Closing device</b>	spring rope pulley with sliding hub, diameter series 118 mm, force depending on model 25 N, 50 N or 80 N	double spring rope pulley diameter series 118 mm spring rope pulley diameter series 177 mm counter weight provided on site
<b>Control of closing speed</b>	lamellar radial damper LD 50 for rope or toothed belt	lamellar radial damper LD 50 with special oil lamellar radial damper LD 100
<b>Damping transmission</b>	revolving rope $\varnothing$ 2 mm or toothed belt 10 mm	other rope or toothed belt types chain
<b>Idler pulley</b>	for rope or toothed belt	special type according to damping transmission
<b>Door actuator</b>	for rope or toothed belt	special type according to damping transmission
<b>Door actuator for second door leaf</b>	—	Has always to be ordered separately.



## DICTAMAT 50 BK - Modular System Standard Kits - Overview

The different standard kits of the DICTAMAT 50 BK modular system which have been composed, are suitable for most sliding doors. Their main difference is the closing force of the spring rope pulley and the type of damping transmission - rope (Seil) **S** or toothed belt (Zahnriemen) **Z**. The standard kits are automatically provided with the LD radial damper corresponding to the closing force of the spring rope pulley.

On this page you will find an overview about the components included in the standard kits. On the following pages the individual components of these kits will be described in detail.

### Standard Kits DICTAMAT 50 BK

The **DICTAMAT 50 BK** is available in **two basic versions**:

DICTAMAT 50 BK-**Z**: power transmission by revolving toothed belt

DICTAMAT 50 BK-**S**: power transmission by revolving steel rope

Generally the version with toothed belt should be favoured as it provides an absolutely positive connection between toothed belt, idler pulley and radial damper.

Among the main advantages of the toothed belt are:

- Due to the positive connection it is not necessary to tension it as hard as the rope. This reduces the friction, requires a less strong spring rope pulley and thus also less effort when opening the door.
- The toothed belt cannot slip.
- The system works with less noise than the version with rope.

Contrary to the DICTAMAT 50 BK-S, the DICTAMAT 50 BK-Z is at the moment not yet available in completely rustless material. The material data are included in the information about the individual components of the kits on the following pages.

### Components Included Standard Kits DICTAMAT 50 BK-Z

Spring rope pulley with bracket and plastics rope

LD 50 radial damper with toothed wheel and mounting bracket set for horizontal or vertical mounting

Idler pulley for toothed belt and mounting bracket set

Door actuator with toothed belt tensioner

### Accessories DICTAMAT 50 BK-Z

Toothed belt HTD 5M, 10 mm wide, length depends on door width (approx. door width x 4)

Door actuator for second door leaf for toothed belt

Adaptor plates and brackets for LD 50 radial damper and idler pulley

### Components Included Standard Kits DICTAMAT 50 BK-S

Spring rope pulley with bracket and plastics rope

LD 50 radial damper with rope pulley and mounting bracket set for horizontal or vertical mounting

Idler pulley for rope with rope coming-off prevention and mounting bracket set

8 m steel rope Ø 2 mm (revolving rope)

Door actuator with rope tensioner

### Accessories DICTAMAT 50 BK-S

Door actuator for second door leaf with additional compensation spring and rope clamp

Adaptor plates and brackets for LD 50 radial damper and idler pulley



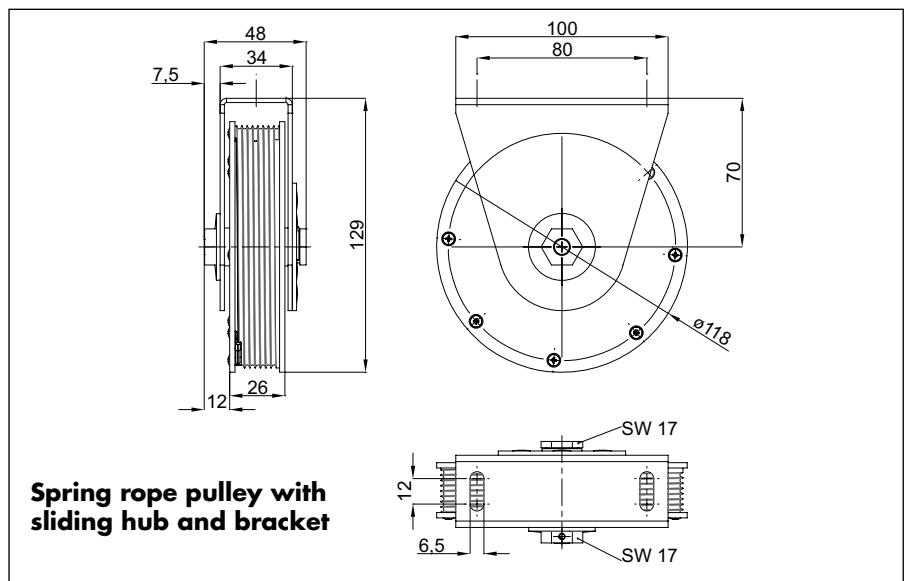
## DICTAMAT 50 BK - Modular System Components of Standard Kits: Spring Rope Pulley

The standard kits of the DICTAMAT 50 BK, irrespective of being a version BK-Z or BK-S, always use a spring rope pulley of the 118 mm diameter series. It features a sliding hub and a bracket for easy mounting.

The spring rope pulley is available with the following spring forces: 25 N, 50 N, 80 N. The possible working travel depends on the closing force - see diagram further down on this page. **The used spring rope pulley always determines the rope to be used.**

More information about the spring rope pulleys can be found beginning on page 02.101.00 (the part numbers of the possible spring rope pulleys are: 070102, 070093, 070094 or 070103, 070098, 070099).

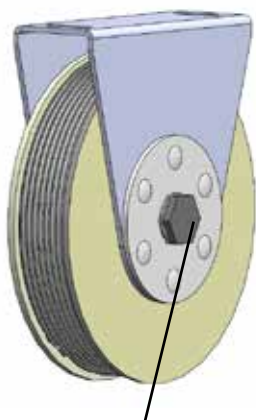
### Dimensions Spring Rope Pulley Standard Kits



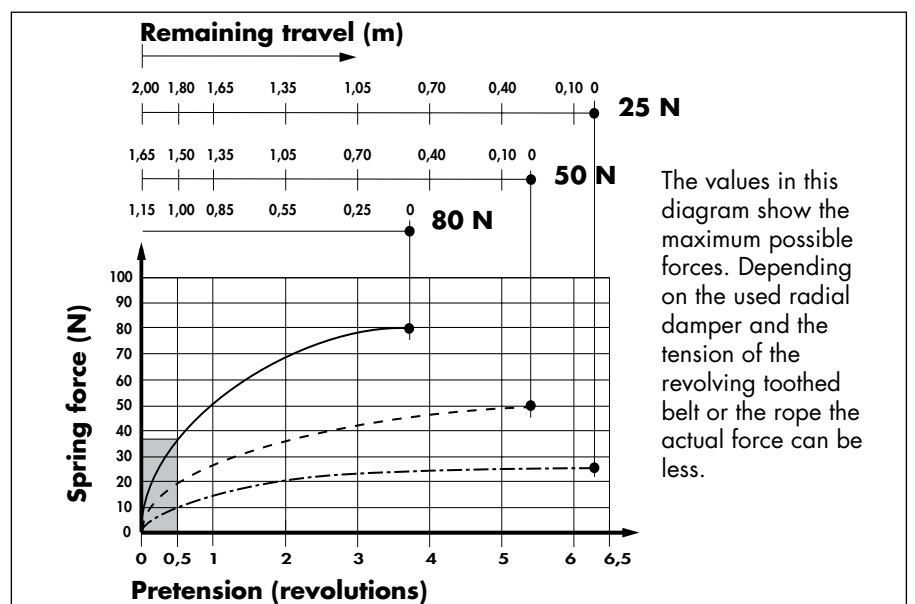
Spring rope pulley with sliding hub and bracket

Material casing	flame retardant DOMAMID plastics
Material rope	flame retardant Kevlar rope with polyester coat, approx. Ø 2 mm, with cable eye stiffener (inner Ø approx. 5.5 mm)
Material bracket	zinc-plated sheet steel, alternatively AISI 304

### Force-Travel Diagram



Adjusting of the damping force  
(on both sides, wrench size SW 17)





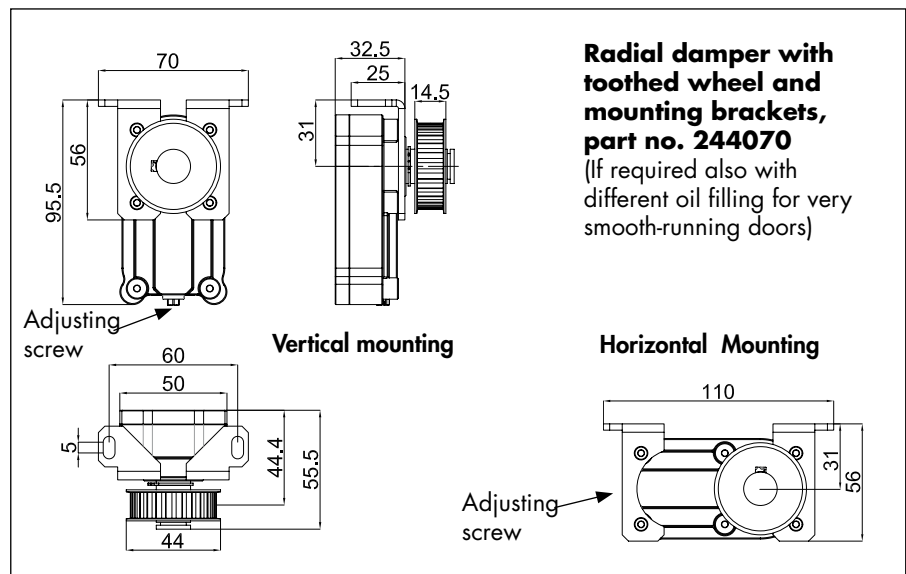
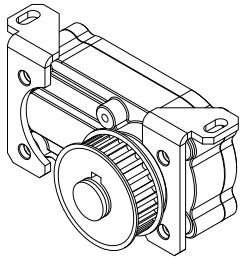
**DICTAMAT 50 BK - Modular System**  
**Components of Standard Kits: LD 50 Z Radial Damper**

For the standard kits always the LD 50 radial damper is used, however, with oils of different viscosity. Information about the adjusting range with the minimum and maximum forces can be found on page 02.100.00.

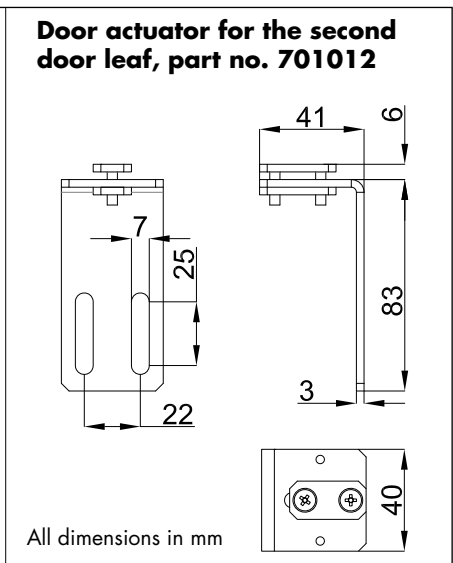
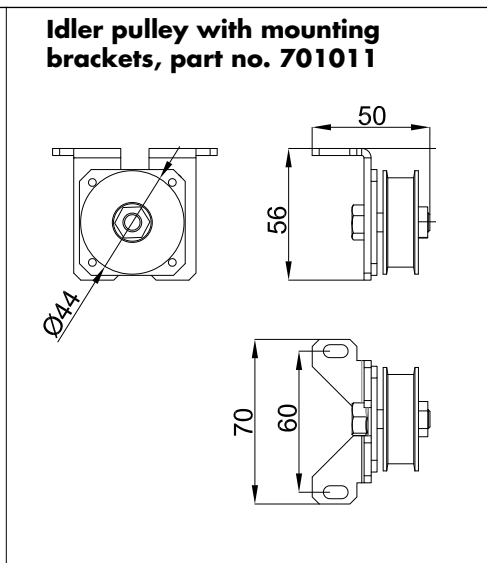
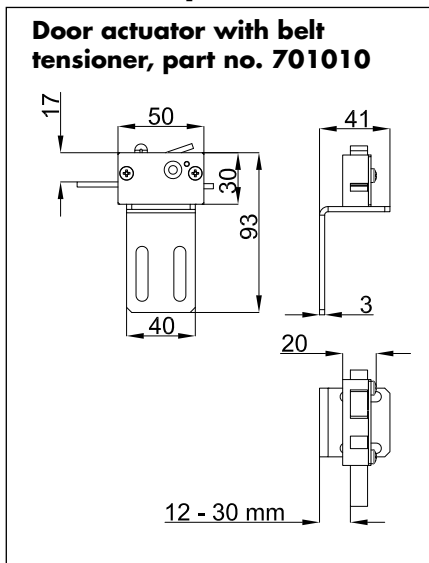
For heavier and larger doors always the DICTAMAT 50 BK-Z should be used as its positive connection transmits the damping in an optimum way and also reduces the necessary closing force of the spring rope pulley (less loss of force due to friction).

For some mounting information see top of the following page.

**Dimensions**  
**LD 50 Radial Damper**  
**with Toothed Wheel**



**Dimensions**  
**Other Components**



**Material**

Material LD	casing flame retardant DOMAMID plastics, toothed wheel steel
Material toothed belt	white polyurethane, 92 ShA
Material brackets	zinc-plated sheet steel, alternatively AISI 304 or AISI 316
Idler pulley	polyamide





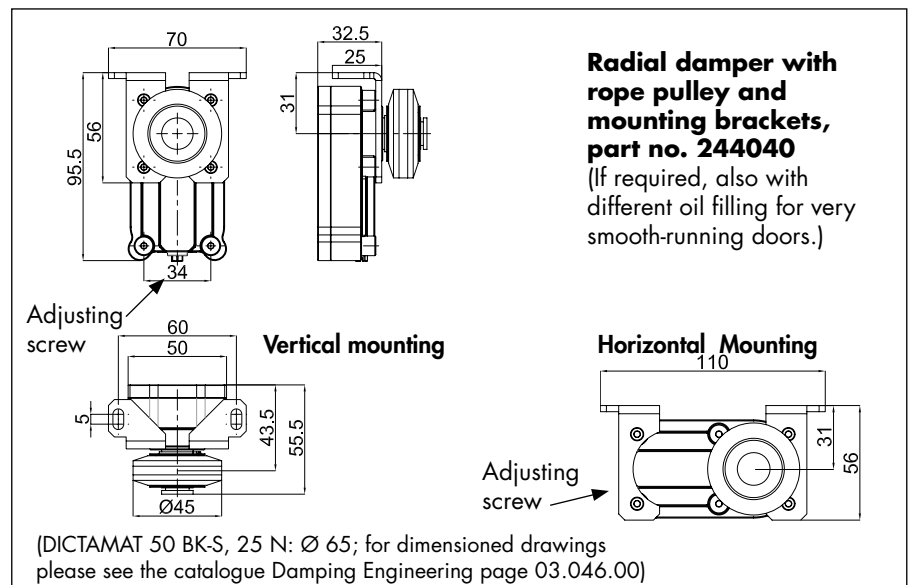
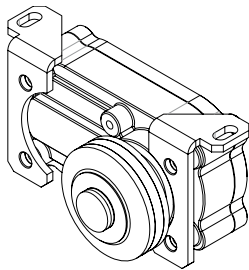
## DICTAMAT 50 BK - Modular System Components of Standard Kits: LD 50 S Radial Damper

When choosing the **mounting position** of any LD 50 model (toothed belt and rope), you should consider besides the available space the accessibility of the adjusting screw for later adjustments.

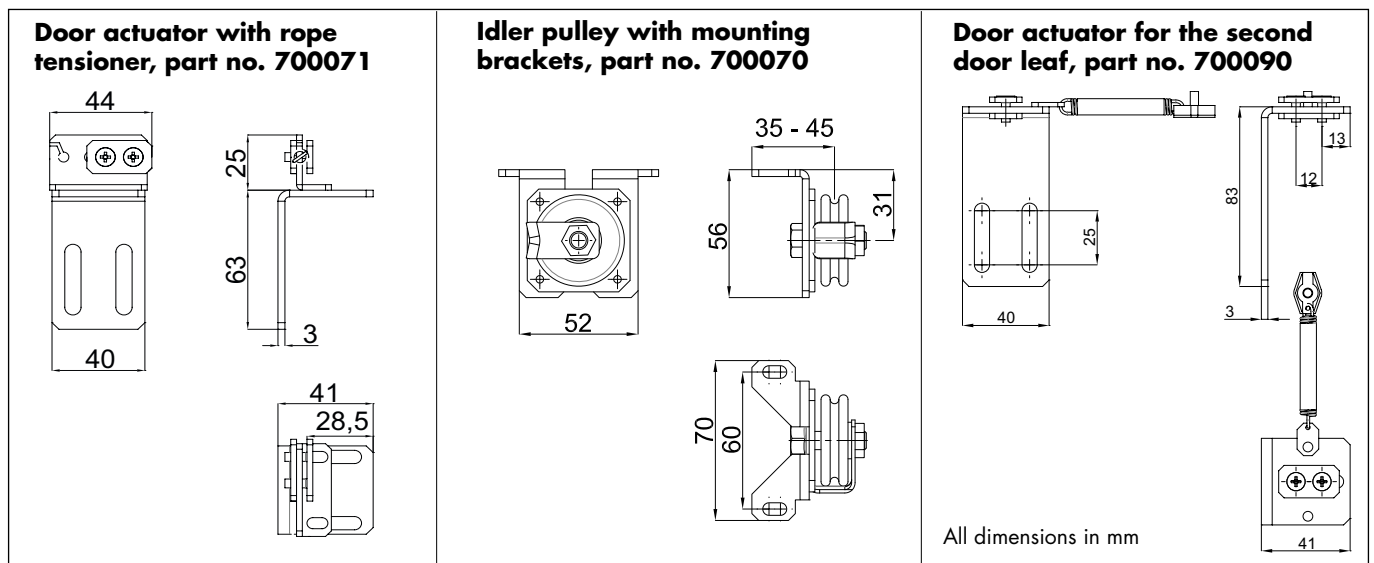
The **mounting bracket set** of the radial damper LD 50 allows for horizontal and also for vertical mounting. This gives the most flexibility. In addition, for the radial damper and the idler pulley there are available **adaptor plates** which facilitate an easy mounting of the respective component to the most different rails and positions.

ATTENTION: Rope pulley Ø of the DICTAMAT 50 BK-S, 25 N radial damper: 65 mm  
Rope pulley Ø of the DICTAMAT 50 BK-S, 50 N and 80 N radial damper: 45 mm

### Dimensions LD 50 Radial Damper with Rope Pulley



### Dimensions Other Components



### Material

Material LD	casing flame retardant DOMAMID plastics, rope pulley aluminium with Vulkollan insert
Material steel rope	steel or AISI 304 or AISI 316
Material brackets	zinc-plated sheet steel, alternatively AISI 304 or AISI 316
Idler pulley	polyamide



## DICTAMAT 50 BK - Modular System

### Order Information Standard Kits, Other Options

The following list just shows the standard versions.

On demand, further special versions can be provided, e.g. with components in AISI 316 stainless steel. Furthermore, e.g. fixing accessories adapted especially to the respective rail system can be produced.

DICTATOR also offers a free of charge technical advisory service to support you in developing object related solutions. If required, drawings of the components are available in different formats.

## Order Information Standard Kits

### DICTAMAT 50 BK modular system

#### a) Toothed belt version

DICTAMAT 50 BK-Z, 25 N	part no. 701005
DICTAMAT 50 BK-Z, 50 N	part no. 701006
DICTAMAT 50 BK-Z, 80 N	part no. 701007

#### Accessories for the modular system, toothed belt

Toothed belt HDT5, 10 mm wide, per meter	part no. 710502
Door actuator toothed belt for second door leaf, zinc-plated	part no. 701012

#### b) Rope version

DICTAMAT 50 BK-S, 25 N	part no. 700054
DICTAMAT 50 BK-S, 50 N	part no. 700080
DICTAMAT 50 BK-S, 80 N	part no. 700081
DICTAMAT 50 BK-S, 25 N, rustless	part no. 700055
DICTAMAT 50 BK-S, 50 N, rustless	part no. 700085
DICTAMAT 50 BK-S, 80 N, rustless	part no. 700086

#### Accessories for the modular system, rope

Door actuator rope for second door leaf, zinc-plated, with compensation spring and rope clip	part no. 700090
Door actuator rope for second door leaf, AISI 304 with compensation spring and rope clip	part no. 700091

#### c) Accessories for the modular system in general

Mounting plate spring rope pulley, zinc-plated	part no. 070114
Adaptor plate mounting LD 50, 75 x 80 mm, zinc-plated	part no. 244050
Adaptor bracket mounting LD 50, 70 x 25 x 40 mm, zinc-plated	part no. 244051
Adaptor plate mounting LD 50, 75 x 80 mm, AISI 304	part no. 244052
Adaptor bracket mounting LD 50, 70 x 25 x 40 mm, AISI 304	part no. 244053

The components of the modular system are **also separately** available. In case of need please contact us. It is also possible to use the spring rope pulley with 100 N (see page 02.107.00).

Our technicians would be happy to design special variants for your applications.





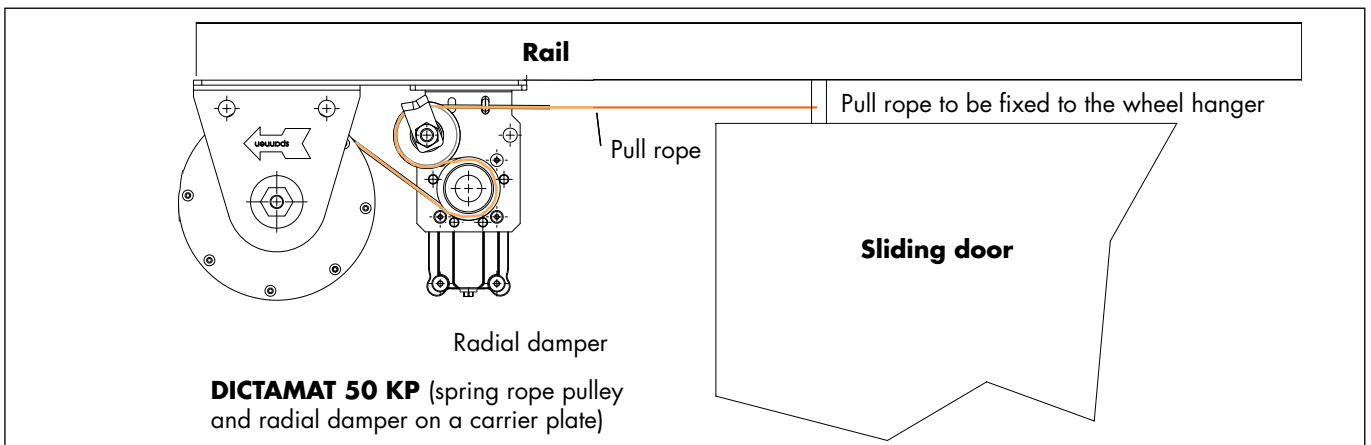
## DICTAMAT 50 - Compact Units Versions

The DICTAMAT 50 is also available as compact unit. In this case the spring rope pulley and the damper are mounted on a mounting plate or a mounting bracket ready to be fixed to the rail. Which one of the two versions is used, depends on the space available on site.

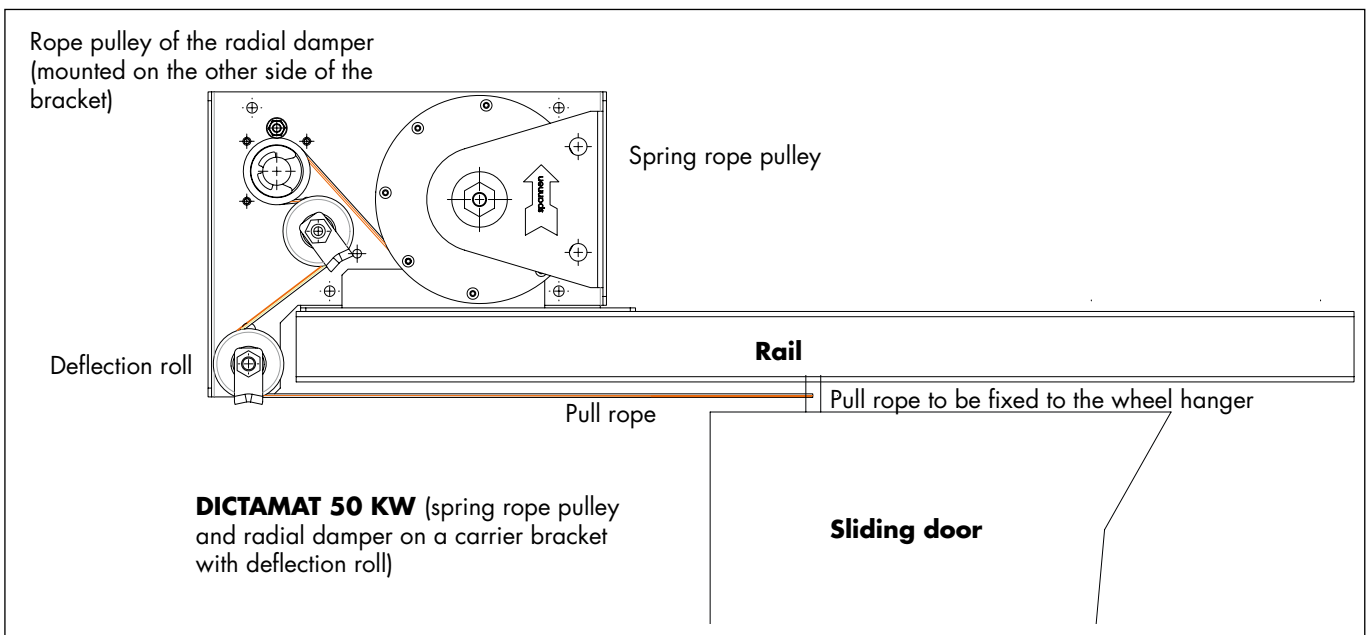
- DICTAMAT 50 **KP**: with mounting plate, for mounting below the rail
- DICTAMAT 50 **KW**: with mounting bracket, for mounting above the rail

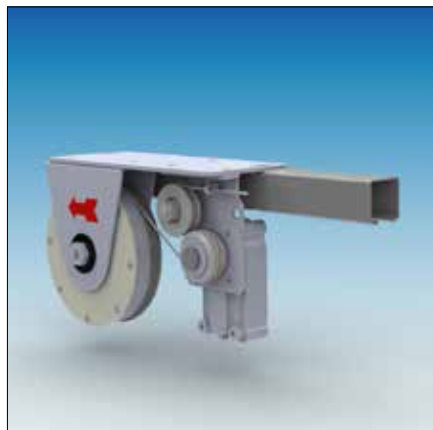
In case of the compact units the pull rope of the spring rope pulley is guided via the rope pulley of the damper to the door, i.e. the closing speed is controlled directly by the pull rope of the spring rope pulley. For this reason any manual manipulation of the closing (additionally pushing the door) may cause the so-called slack rope!

### Functional principle DICTAMAT 50 KP



### Functional principle DICTAMAT 50 KW





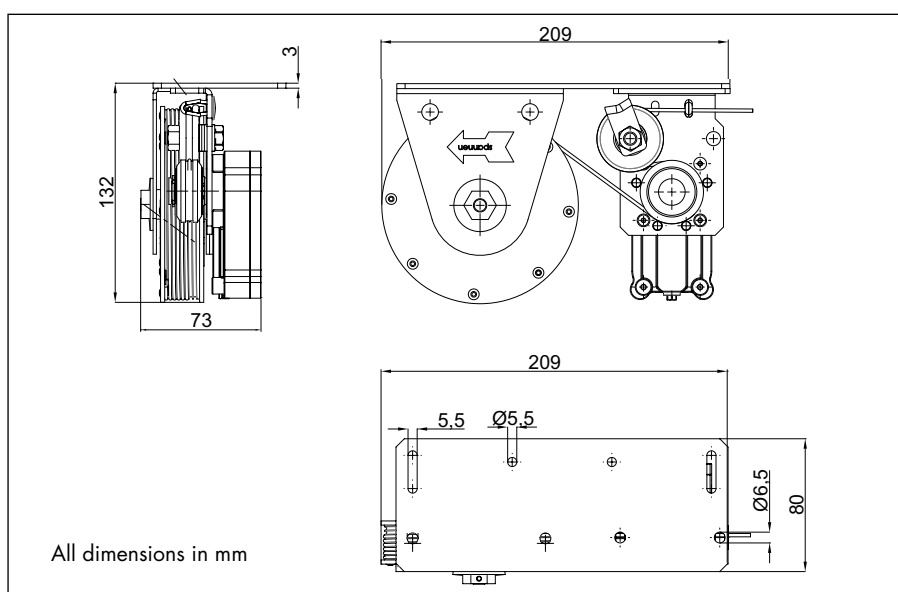
**DICTAMAT 50 - Compact Units**  
**DICTAMAT 50 KP**

The DICTAMAT 50 KP has been designed for the installation underneath the rail. The pull rope of the spring rope pulley is guided via the radial damper and an additional guiding pulley directly to the door.

When choosing this model, please take into consideration that you need a different version depending on the door closing to the right or left.

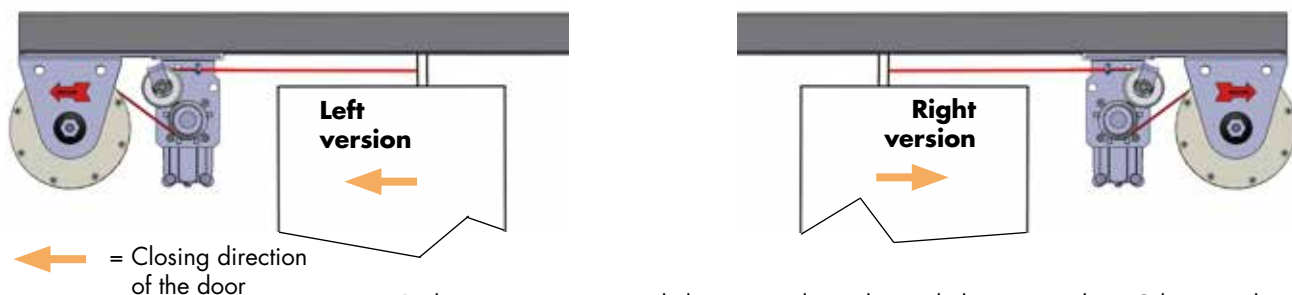
For information about the **materials** see the next page about the DICTAMAT 50 KW.

**DICTAMAT 50 KP**  
 (see also above picture)



**Mounting**

The DICTAMAT 50 KP is mounted on the side of the door where it is in the closed position as then the pull rope can directly be fixed to the door leaf. When ordering the compact unit DICTAMAT 50 KP you have to pay attention to the closing direction of the door (left or right). The above illustration shows the left model for doors closing to the left.



Both components may only be mounted together with the carrier plate. Otherwise there might be a malfunction.

**Components Included**

DICTAMAT 50 KP, consisting of carrier plate with spring rope pulley, 2 m of plastic rope, pressure roll with rope coming-off prevention, radial damper with rope pulley

**Accessories**

Covers in different versions on demand



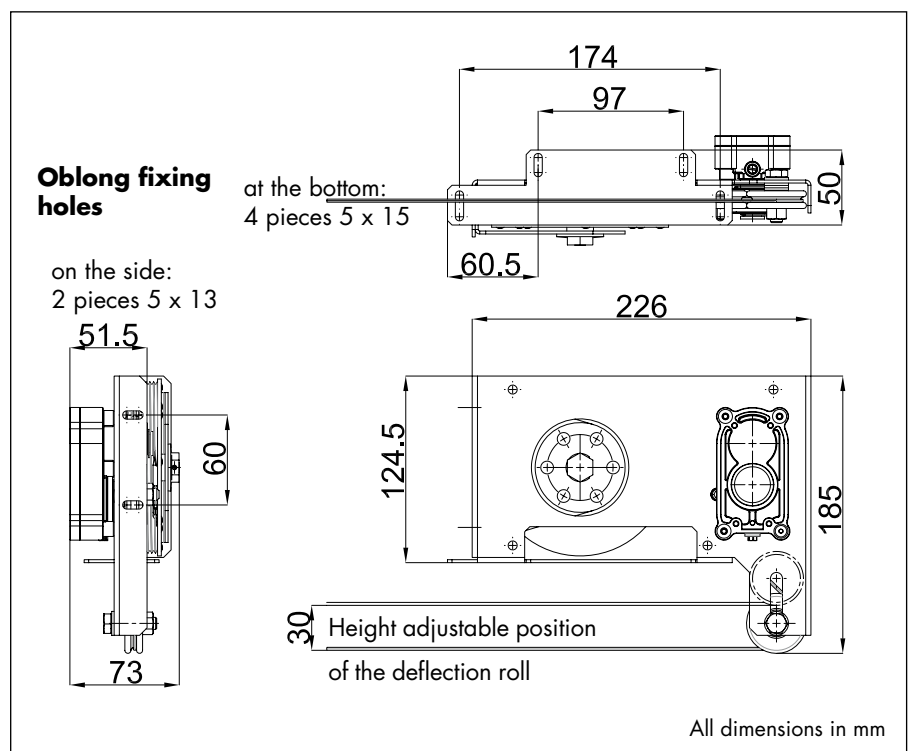
## DICTAMAT 50 - Compact Units DICTAMAT 50 KW

The DICTAMAT 50 KW is intended for its mounting on top of the rail. An universal carrier bracket offers different fixing possibilities.

The compact unit KW combines the spring rope pulley, the radial damper with pressure roll and another deflection roll for the rope of the spring rope pulley all on a carrier bracket. The pull rope of the spring rope pulley runs via the rope pulley of the radial damper and the height adjustable deflection roll (30 mm of adjustment range) to the door leaf.

### DICTAMAT 50 KW

(see also above picture)



### Mounting

Usually the DICTAMAT 50 KW is mounted on the side of the door where it is in the closed position, as then the pull rope can directly be fixed to the door leaf.

The DICTAMAT 50 KW can be used, without converting, for right and left closing doors.

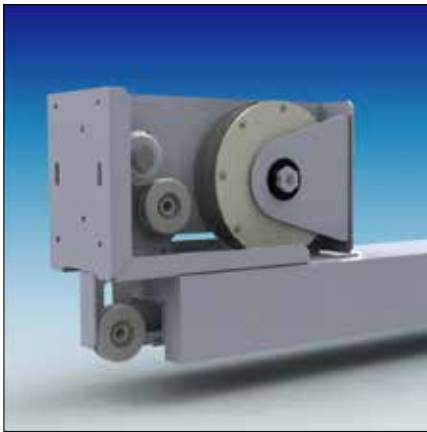
The rope is guided either directly underneath or in the rail or alternatively parallel to the rail (see next page).

### Material

LD	casing flame retardant DOMAMID plastics, rope pulley aluminium with Vulkollan insert
Plastic rope	flame retardant Kevlar rope with polyester coat, approx. Ø 2 mm, with cable eye stiffener
Brackets	zinc-plated sheet steel, alternatively AISI 304 or AISI 316
Idler pulleys	polyamide

### Components Included

DICTAMAT 50 KW, consisting of carrier bracket with spring rope pulley, 2 m plastic rope, pressure roll, rope coming-off prevention, radial damper with rope pulley, deflection roll



## DICTAMAT 50 - Compact Units

### Mounting of DICTAMAT 50 KW, Order Information

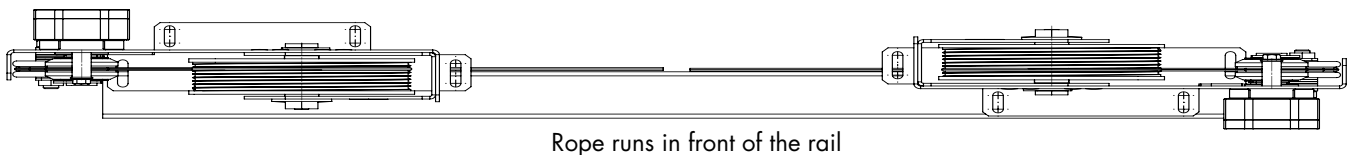
The following illustrations show different mounting possibilities of the DICTAMAT 50 KW compact unit.

#### Mounting example DICTAMAT 50 KW

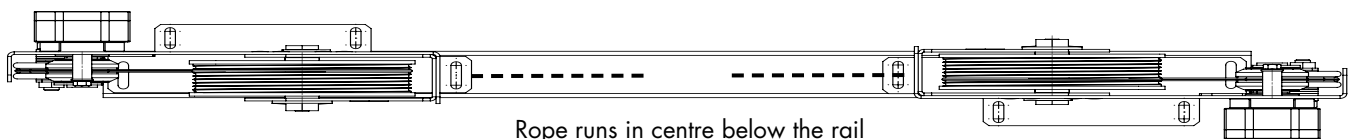


DICTAMAT 50 KW  
 mounted on the left, door closes to the left

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



Rope runs in front of the rail



Rope runs in centre below the rail

## Order Information

### Compact Units

#### DICTAMAT 50 KP, compact unit with carrier plate

DICTAMAT 50 KP, 50 N, left	part no. 700082
DICTAMAT 50 KP, 50 N, left, rustless	part no. 700087
DICTAMAT 50 KP, 50 N, right	part no. 700093
DICTAMAT 50 KP, 50 N, right, rustless	part no. 700094

#### DICTAMAT 50 KW, compact unit with carrier bracket

DICTAMAT 50 KW, 50 N	part no. 700083
DICTAMAT 50 KW, 50 N, rustless	part no. 700088

More types with differing closing forces (25 N or 80 N) on demand.



## DICTAMAT 50 WS - with Tensioned Wire Rope Basic Set-Up

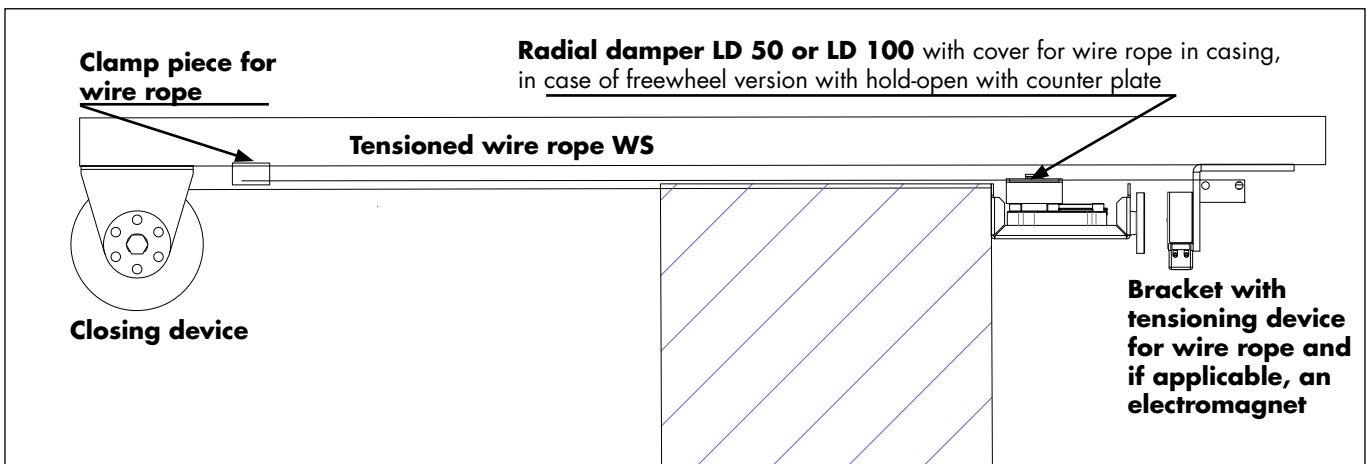
In the DICTAMAT 50 WS the LD radial damper controls the closing speed by means of a tensioned steel wire drive rope. This is a very space saving solution as it doesn't require a revolving rope or toothed belt like the DICTAMAT 50 BK. The wire rope is guided via the covered special rope pulley of the LD radial damper.

Depending on the application, **different versions** of the **DICTAMAT 50 WS** are available:

- DICTAMAT 50 WS without hold-open device, just for closing
- DICTAMAT 50 WS-M with hold-open device (e.g. for fire protection sliding doors)
- DICTAMAT 50 WS-MFL as freewheel version: the DICTAMAT 50 closes the door only in case of an alarm.

### Structure DICTAMAT 50 WS

The drawing shows the components of the DICTAMAT 50 WS. They can be combined at will. In case of the freewheel version the bracket with the radial damper is not fixed on the door leaf. It runs as freewheel carrier casing directly on the wire drive rope and is stabilized by an additional supporting rope.



### Components

	DICTAMAT 50 WS	DICTAMAT 50 WS-M	DICTAMAT 50 WS-MFL
<b>Closing device</b> (see page 02.085.00 and 02.101.00 et sqq.)	spring rope pulley with sliding hub diameter series 118 mm (25 N, 50 N or 80 N), diameter series 177 mm (100 N)	spring rope pulley with sliding hub diameter series 118 mm, (25 N, 50 N), spring rope pulley 160 N, counterweight on site	spring rope pulley with sliding hub diameter series 118 mm, force depending on model 25 N or 50 N, spring rope pulley 160 N, counterweight on site
<b>Control of closing speed</b>	LD 50 or LD 100 lamellar radial damper (depending on door size and weight) with cover for wire rope		
<b>Damping transmission</b>	wire rope WS6 (length depends on door width)		
<b>Bracket for LD radial damper</b>	mounting bracket	mounting bracket with counter plate GD 50	freewheel carrier with counter plate AP GD 50 and rubber buffer
<b>Tensioning kit for wire rope and if required steel rope</b>	bracket with tensioner, clamp piece on the other side of the door	bracket for electromagnet EM GD 50 Q 23 with tensioner, clamp piece on the other side of the door	bracket for electromagnet EM GD 50 Q 23 with tensioner for wire rope and fixing of supporting rope, clamp piece for wire rope and tensioning device for rope
<b>Electromagnet</b>	–	EM GD 50 Q 23	
<b>Supporting rope</b>	–	–	steel rope Ø 3 mm, standard length 5 m, or appropriate for the door



### DICTAMAT 50 WS - with Tensioned Wire Rope Basic Version just for Closing

In case of the DICTAMAT 50 WS the bracket with the radial damper LD is fixed directly on the door. The pull rope of the spring rope pulley is hooked in the flap of the mounting bracket destined for this purpose. The wire rope is fixed by means of the clamp piece and the tensioning kit and tensioned. Immediately after having been opened by hand the DICTAMAT 50 WS closes the door at a controlled speed by the spring rope pulley.

Due to the tensioned wire rope the DICTAMAT 50 WS needs less space than the modular system DICTAMAT 50 BK, but the wire rope may cause a higher friction which will influence the effort necessary for opening the sliding door.

### Standard Kits DICTAMAT 50 WS

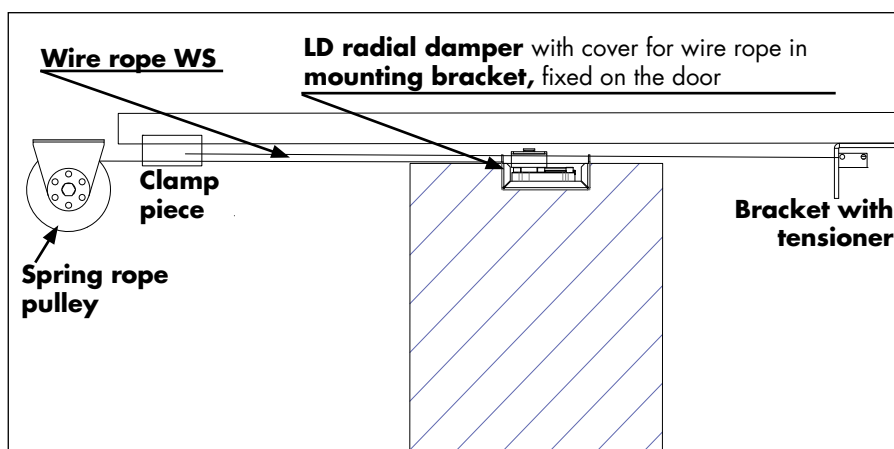
Same as for the DICTAMAT 50 BK also for the DICTAMAT 50 WS standard kits have been prepared which harmonize the performance of the spring rope pulley and the LD radial damper. Their main difference is the closing force.

But of course you also can compose the DICTAMAT 50 WS differently. Our technical customer service will be glad to help you.

Information with dimensioned drawings about the spring rope pulleys can be found on page 02.085.00 and starting on page 02.101.00. The spring rope pulley also determines the working travel of the DICTAMAT 50 WS.

All other components are described following the information about the different versions of the DICTAMAT 50 WS beginning on page 02.097.00.

### Mounting Example DICTAMAT 50 WS



Depending on the available space the mounting bracket with the LD radial damper is fixed on top of the door leaf or to its side. The rope of the spring rope pulley is fixed to the provided flap of the mounting bracket.

### Components Included Standard Kit DICTAMAT 50 WS

- Spring rope pulley with bracket and plastics rope
- LD 50 radial damper for WS6 wire rope
- Mounting bracket for LD radial damper
- Mounting bracket with tensioner and clamp piece for WS6 wire rope
- 5 m of WS6 wire rope

### Order Information DICTAMAT 50 WS

DICTAMAT 50 WS, 25 N	part no. 701020
DICTAMAT 50 WS, 50 N	part no. 701021
DICTAMAT 50 WS, 80 N	part no. 701022





## DICTAMAT 50 WS-M - with Tensioned Wire Rope Closing Device with Hold-Open Device

The DICTAMAT 50 WS-M features an **electromagnet fixed** to the bracket of the tensioning device of the wire rope. The mounting bracket for the radial damper is equipped with the counter piece, the corresponding **counter plate**.

When the door is completely opened by hand, the **magnet** will keep the mounting bracket of the radial damper **in the open position**. Only when the power supply of the magnet is cut - either by a push button or in case of fire or smoke protection doors by a smoke detector - the spring rope pulley will close the door at a controlled, adjustable speed.

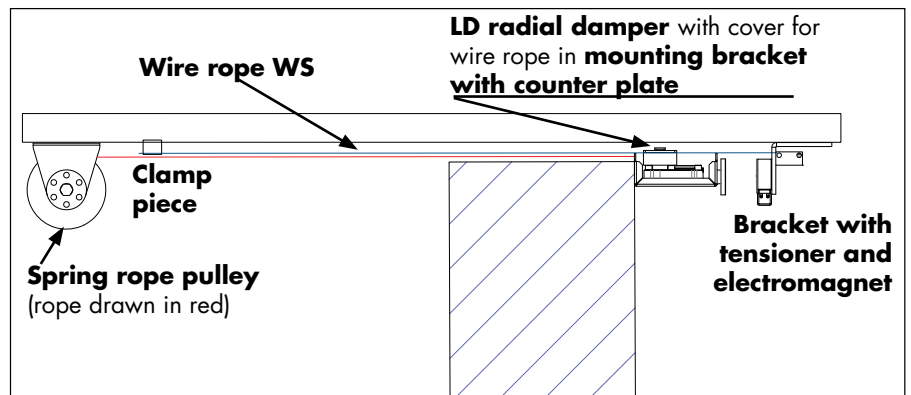
### Standard Kits **DICTAMAT 50 WS-M**

The individual components (LD radial damper, spring rope pulley, EM GD 50 electromagnet with corresponding counter plate) of the DICTAMAT 50 WS-M standard kits have been tested for their use on smoke and fire protection doors. An approval of the complete system for the fire protection applications, however, is not available due to non existent standards. If required, please contact our technical customer service.

Of course, the DICTAMAT 50 WS-M can also be combined differently. Our technical customer service looks forward to help you.

Information with dimensioned drawings about the spring rope pulleys can be found on page 02.085.00 and beginning on page 02.101.00. The other components are described following the information about the different versions of the DICTAMAT 50 WS beginning on page 02.097.00.

### Mounting Example **DICTAMAT 50 WS-M**



The mounting position of the radial damper with the mounting bracket depends on the rail and the space available. In the above drawing it is fixed to the face side of the door leaf. Important is when the door is open that the counter plate lies against the whole surface of the magnet.

### Components Included **Standard Kit DICTAMAT 50 WS-M**

Spring rope pulley with bracket and plastics rope

LD 50 radial damper for WS6 wire rope

Mounting bracket for LD radial damper with AP GD 50 counter plate

Mounting bracket with tensioner for wire rope and EM GD 50 Q 23 electromagnet (040020)

Clamp piece for WS6 wire rope

5 m of WS6 wire rope

### Order Information **DICTAMAT 50 WS-M**

DICTAMAT 50 WS-M, 25 N

part no. 701023

DICTAMAT 50 WS-M, 50 N

part no. 701024



## DICTAMAT 50 WS-MFL - with Tensioned Wire Rope Closing Device with Freewheel Function

The DICTAMAT 50 WS-MFL is the ideal solution for all fire and smoke protection sliding doors which usually are opened and closed by hand. To be sure that the door closes reliably in case of a fire, the DICTAMAT 50 with freewheel function is used.

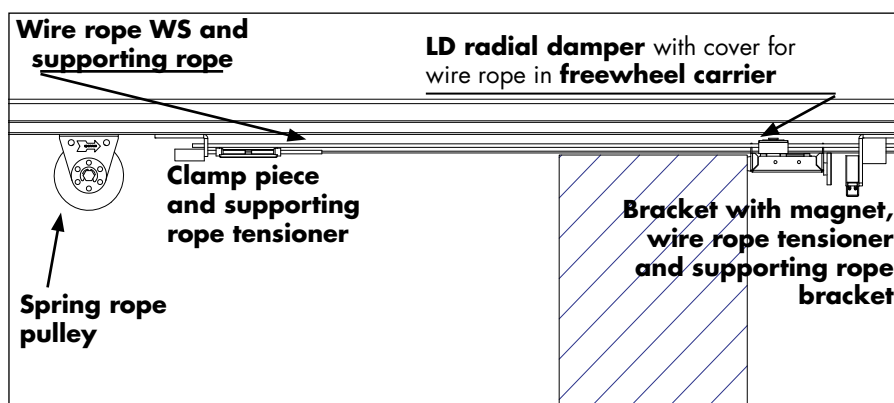
The freewheel carrier casing with the radial damper is not fitted to the door. It runs along the tensioned wire rope and an additional supporting rope. When the door is completely reopened after the magnet had been released, this automatically pushes the freewheel carrier in the open position of the door and pretensions the spring rope pulley. The magnet keeps the freewheel carrier with the radial damper in the open position. It only releases it in the event of an alarm. Then the freewheel carrier will close the door pushing it at a controlled speed.

### Standard Kits DICTAMAT 50 WS-MFL

Also the standard kits of the DICTAMAT 50 WS-MFL mainly differ in their closing force. The single components (LD radial damper, spring rope pulley diameter series 118, electromagnet EM GD 50 with corresponding counter plate) of the standard kits of the DICTAMAT 50 WS-MFL have been tested for their use on smoke and fire protection doors. Due to not existing standards, however, there is no approval of the complete system for the fire protection sector. If required, please contact our technical customer service.

Of course you also can compose the DICTAMAT 50 WS-MFL differently. Our technical customer service will be happy to advise you.

### Mounting Example DICTAMAT 50 WS-MFL



The bracket with magnet and wire rope tensioner is fixed in the open position of the door. The wire rope and the supporting rope guide and support the freewheel carrier. The ropes have to be arranged in a way that the closing freewheel carrier will hit the front side of the door or a corresponding counter device. As the freewheel carrier features a rubber buffer, the metal casing of the freewheel carrier will not directly hit the door leaf.

### Components Included Standard Kit DICTAMAT 50 WS-MFL

Spring rope pulley with bracket and plastics rope

LD 50 radial damper for WS6 wire rope

Freewheel carrier for LD radial damper with AP GD 50 counter plate and rubber buffer

Mounting bracket with tensioner for wire rope, bracket for supporting rope and EM GD 50 electromagnet

Clamp piece for WS6 wire rope and tensioning device for supporting rope

5 m of WS6 wire rope and 5 m of steel rope Ø 3 mm (supporting rope)

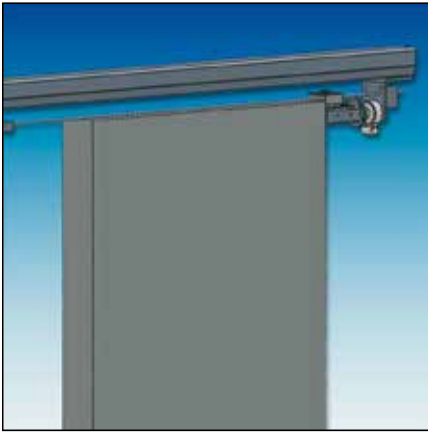
### Order Information DICTAMAT 50 WS-MFL

DICTAMAT 50 WS-MFL, 25 N

part no. 701025

DICTAMAT 50 WS-MFL, 50 N

part no. 701026



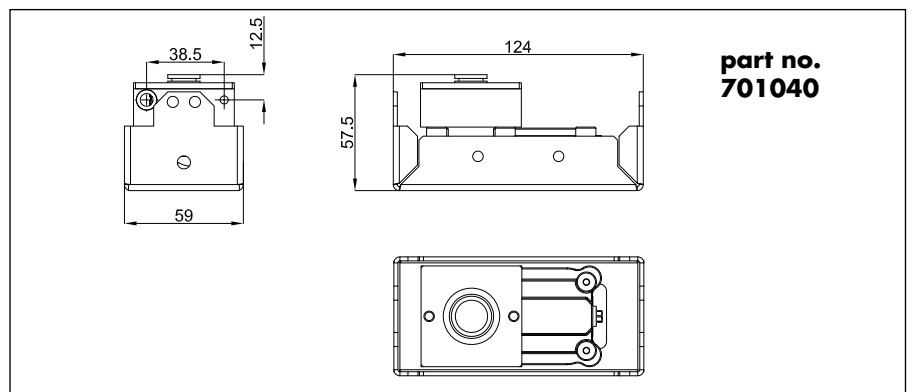
## DICTAMAT 50 WS - Components Mounting Bracket / Freewheel Carrier, LD Radial Damper

All three versions of the DICTAMAT 50 WS use the mounting bracket. For the DICTAMAT 50 WS-M an AP GD 50 counter plate is added to the mounting bracket, to the one for the freewheel version a rubber buffer is added on the opposite side.

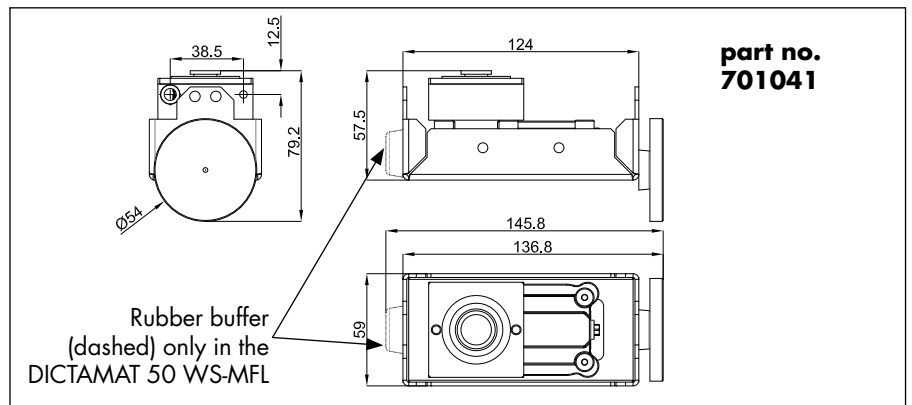
The LD 50 WS radial damper with cover for wire rope is fixed in the mounting bracket from below by 4 screws.

The mounting bracket with the radial damper of the DICTAMAT 50 WS and DICTAMAT 50 WS-M is screwed directly to the door leaf. For this purpose borings are provided in the side or front of the bracket.

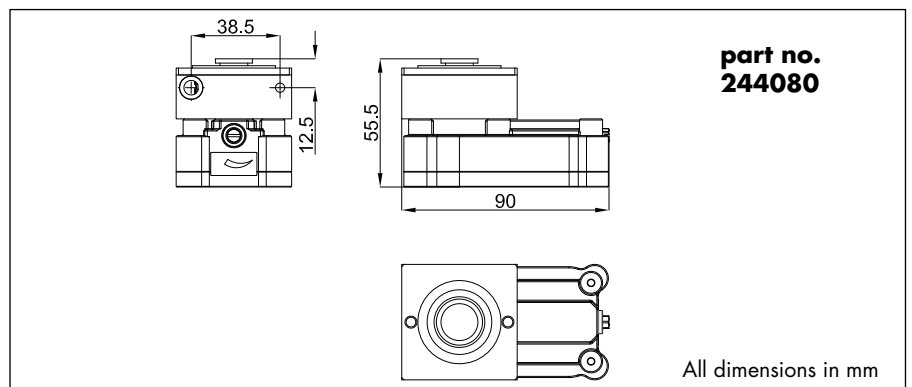
### Mounting Bracket DICTAMAT 50 WS



### Mounting Bracket / Freewheel Carrier DICTAMAT 50 WS-M / DICTAMAT 50 WS-MFL



### LD 50 WS Radial Damper



All dimensions in mm

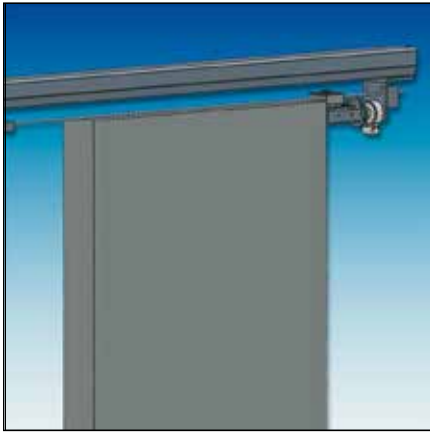
### Material

LD 50 WS radial damper

casing flame retardant DOMAMID plastics,  
 cover for wire rope zinc-plated steel

Mounting bracket/freewheel carrier

zinc-plated steel



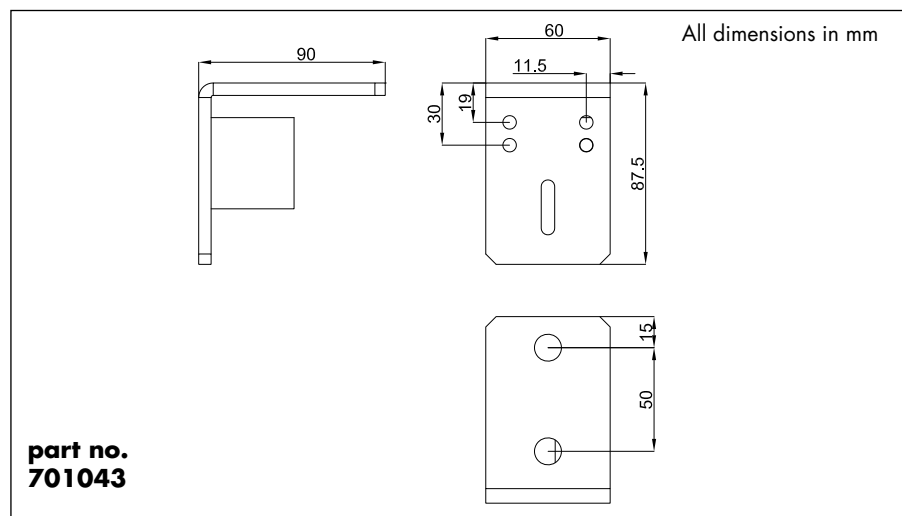
**DICTAMAT 50 WS - Components**  
**Bracket with Wire Rope Tensioner and Magnet**

The bracket with wire rope tensioner is fixed on the side of the door where it is in the open position. The wire rope is simply guided through the tensioner and tensioned with the help of a SW 6 (wrench size) Allen screw.

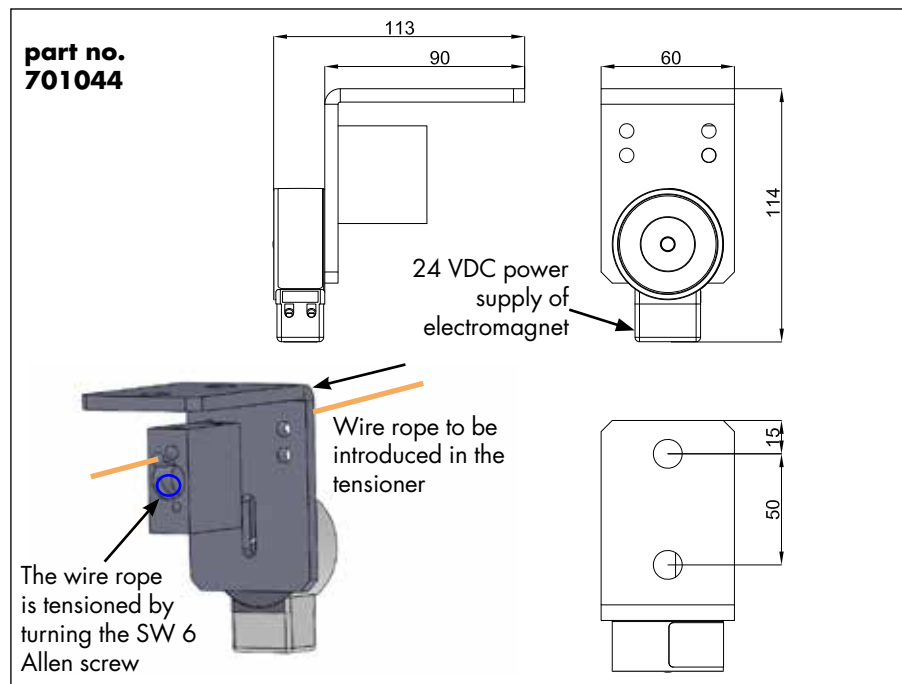
For the versions DICTAMAT 50 WS-M and WS-MFL also an electromagnet is fixed to the bracket. When the door is open it will encounter the counter plate fixed to the mounting bracket or to the freewheel carrier of the LD 50 WS radial damper. The height of the mounting position of the magnet can be adjusted accordingly. The magnet is fed with 24 VDC, 67 mA. The EM GD 50 Q 23 electromagnet, 600 N has been tested for its use on fire and smoke protection doors according to EN 1155.

The supporting rope for the freewheel carrier is also fixed in the bracket.

**Bracket with Wire Rope Tensioner**



**Bracket with Wire Rope Tensioner and EM GD 50 Q 23 Electromagnet**



**Material**

Wire rope tensioner	aluminium
Bracket	zinc-plated steel
Wire rope	steel

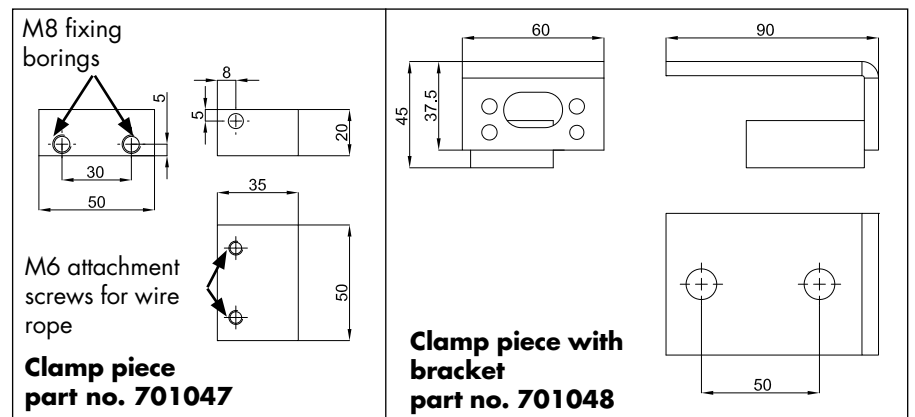


## DICTAMAT 50 WS - Components Clamp Piece Wire Rope with Tensioner Supporting Rope

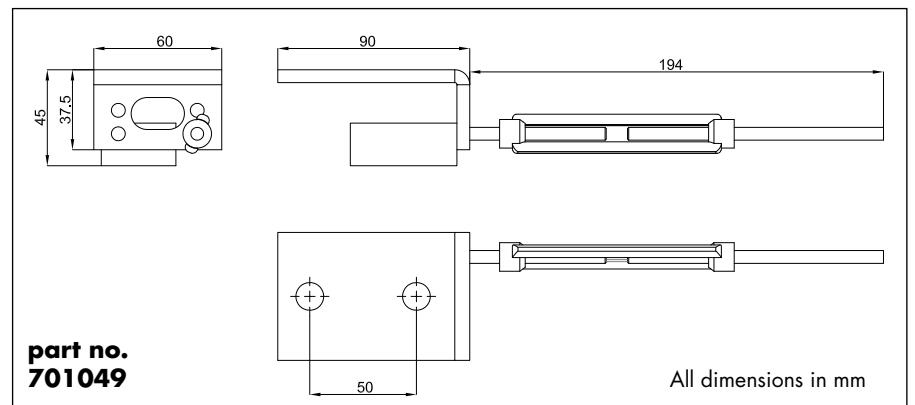
On the other side of the door the wire rope is kept in a clamp piece. This clamp piece can be fixed directly to the rail by 2 M8 screws. Or it is mounted using the bracket which is used for the freewheel version with additional supporting rope tensioner.

The version with freewheel carrier combines the clamp piece with an additional rope tensioner for the supporting rope.

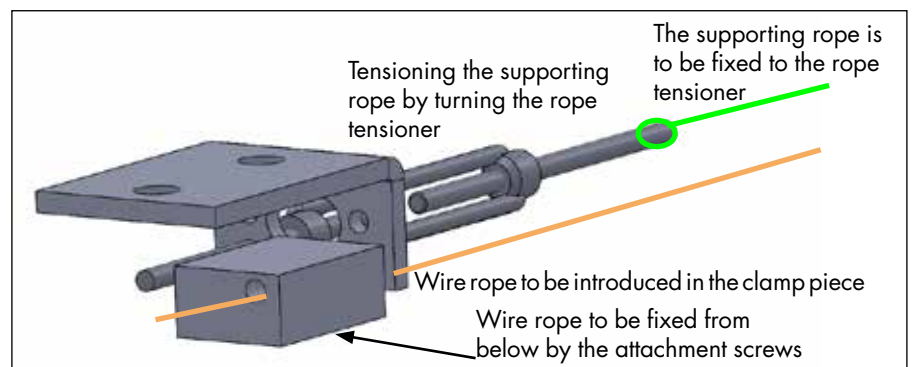
### Clamp Piece for Wire Rope



### Clamp Piece for Wire Rope with Supporting Rope Tensioner and Bracket



### Fixing of Wire Rope and Tensioning of Supporting Rope



### Material

Clamp piece wire rope	aluminium
Bracket	zinc-plated steel
Rope tensioner / steel rope	zinc-plated steel



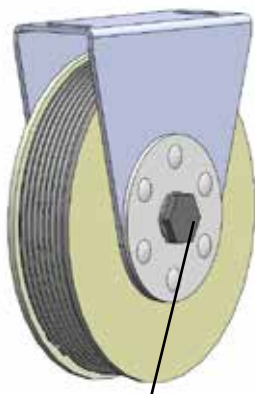
**Technical Information about the DICTAMAT 50**

The closing force of the DICTAMAT 50 is adapted by pretensioning the spring rope pulley accordingly. The more the spring is pretensioned, the shorter becomes the available travel. The continuous adjusting of the closing speed is realized by adjusting the damping force of the radial damper.

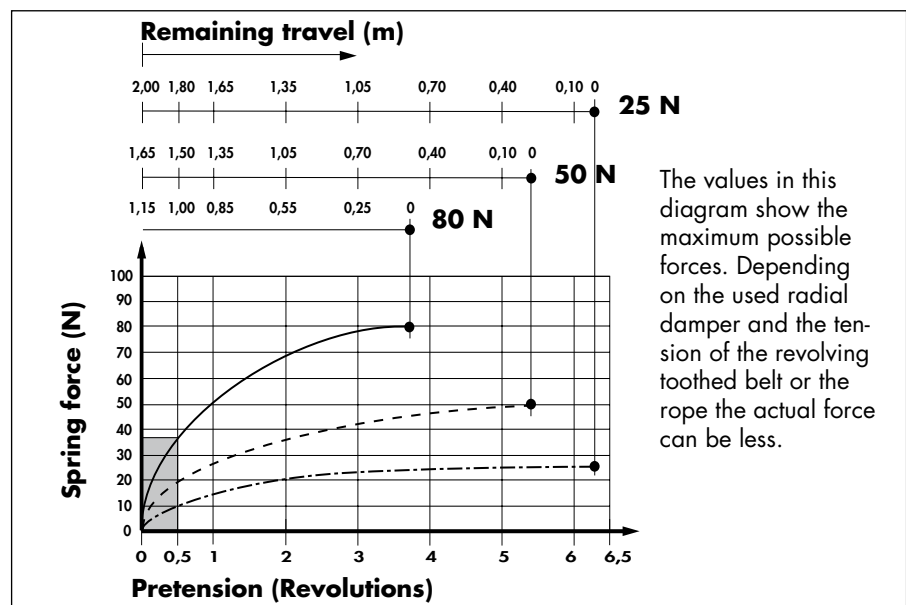
Below are shown the diagrams for the standard versions of the DICTAMAT 50 with a spring rope pulley diameter series 118 mm with 25, 50 and 80 N and the LD 50 radial damper.

The spring rope pulleys feature a sliding hub. This allows to reduce the pretension of the spring without running the risk of damaging the spring.

**Closing Force/Travel**

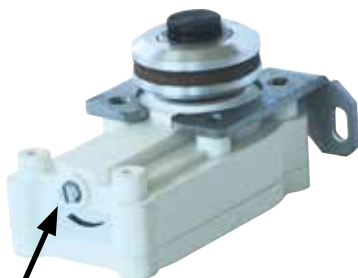


Adjusting of the closing force  
 (from both sides, SW 17)



The values in this diagram show the maximum possible forces. Depending on the used radial damper and the tension of the revolving toothed belt or the rope the actual force can be less.

**Damping force**



Adjusting of the damping force  
 (slotted hexagon screw)

