

DICTAMAT 50 WS - with tensioned wire rope

The flexible sliding door closer



Website

CHARACTERISTICS

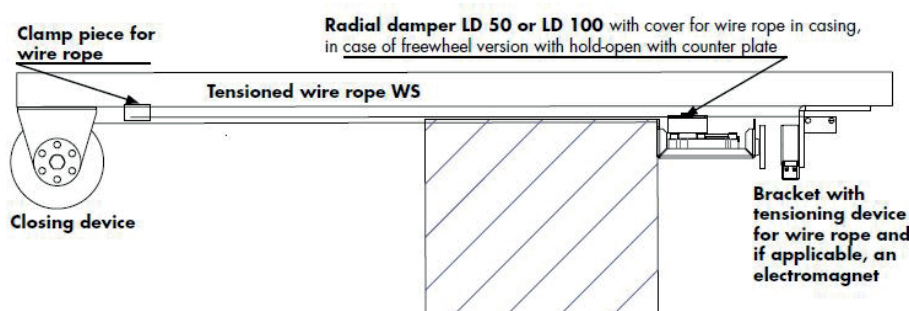
In the DICTAMAT 50 WS the LD radial damper controls the closing speed by means of a tensioned steel wire drive rope. This is a very space saving solution as it doesn't require a revolving rope or toothed belt like the DICTAMAT 50 BK. The wire rope is guided via the covered special rope pulley of the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

Depending on the application, there are different versions of the DICTAMAT 50 WS 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: it closes the door only in case of an alarm



STRUCTURE



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 WS-M	DICTAMAT 50 WS-MFL
Closing device	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
Control of closing speed	LD 50 or LD 100 lamellar radial damper (depending on door size and weight) with attachment for wire rope		
Damping transmission	wire rope WS 6 (length depends on door width)		
Bracket for LD radial damper	mounting bracket	mounting bracket with counter plate GD 50	mounting bracket = freewheel carrier with counter plate AP GD 50 and rubber buffer
Tensioning kit for wire rope and if required steel rope	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
Electromagnet	-	EM GD 50 Q 23	
Supporting rope	-	-	steel rope Ø 3 mm, standard length 5 m, or appropriate for the door

DICTAMAT 50 WS

Basic version just for closing

Description

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.

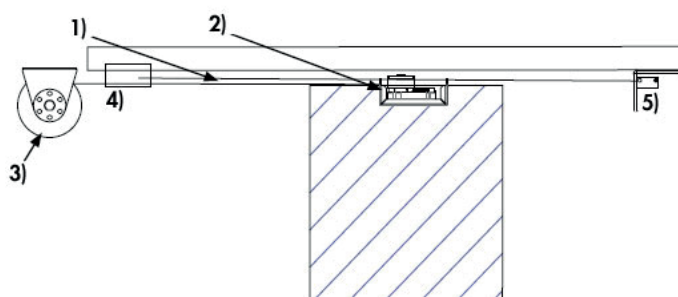
The wire rope is fixed by means of the clamp piece and the tensioning kit and tensioned. Immediately after having been opened by hand the DICTAMAT 50 WS closes the door at a controlled speed by the spring rope pulley.

Thanks 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 sets

Same as for the DICTAMAT 50 BK also for the DICTAMAT 50 WS standard sets 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 here. The spring rope pulley also determines the working travel of the DICTAMAT 50 WS. For more details about all other components, view tab 'Components'.

Mounting example



- 1) Wire rope WS
- 2) LD radial damper with attachment for wire rope in mounting bracket, fixed on the door
- 3) Spring rope pulley
- 4) Clamp piece
- 5) Bracket with tensioner

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 set DICTAMAT 50 WS

- Spring rope pulley with bracket and plastics rope
- LD 50 radial damper for WS 6 wire rope
- Mounting bracket for LD radial damper
- Mounting bracket with tensioner
- Clamp piece for WS 6 wire rope
- 5 m of WS 6 wire rope



Technical manual WS

ORDER INFORMATION STANDARD SETS DICTAMAT 50 WS

Description	Part No.
DICTAMAT 50 WS, 25 N	701020
DICTAMAT 50 WS, 50 N	701021
DICTAMAT 50 WS, 80 N	701022

DICTAMAT 50 WS-M

Closing device with hold-open device

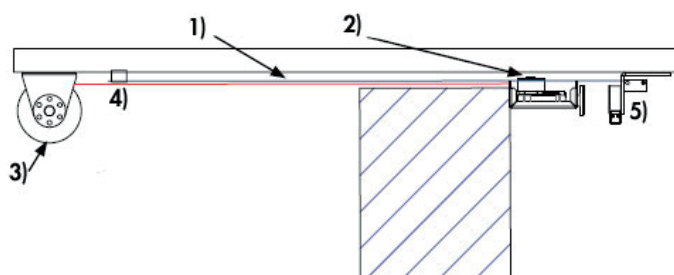
Description

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 sets

The individual components (LD radial damper, spring rope pulley, EM GD 50 electromagnet with corresponding counter plate) of the DICTAMAT 50 WS-M standard sets 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 here. The spring rope pulley also determines the working travel of the DICTAMAT 50 WS. For more details about all other components, view tab "Components".

Mounting example



- 1) Wire rope WS
- 2) LD radial damper with attachment for wire rope in mounting bracket with counter plate
- 3) Spring rope pulley (Rope drawn in red)
- 4) Clamp piece
- 5) Bracket with tensioner and electromagnet

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

- Spring rope pulley with bracket and plastics rope
- LD 50 radial damper for WS 6 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 WS 6 wire rope
- 5 m of WS 6 wire rope



Technical
manual
WS-M

ORDER INFORMATION STANDARD SETS DICTAMAT 50 WS-M

Description	Part No.
DICTAMAT 50 WS-M, 25 N	701023
DICTAMAT 50 WS-M, 50 N	701024

DICTAMAT 50 WS-MFL

Closing device with freewheel function

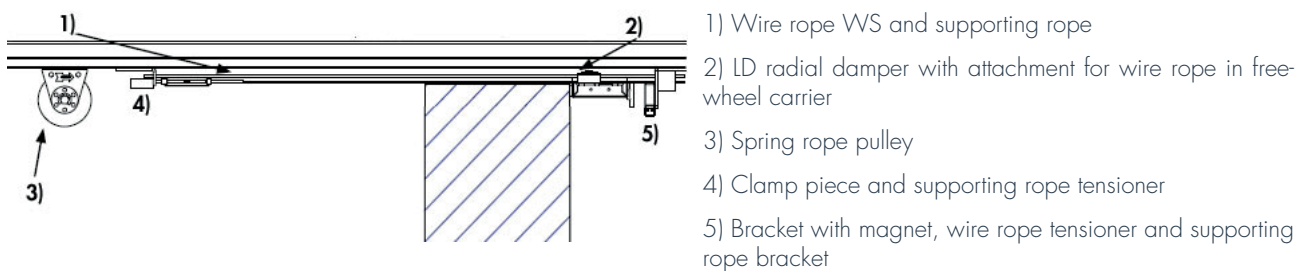
Description

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 sets

The standard sets of the DICTAMAT 50 WS-MFL also 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 sets 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



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

- Spring rope pulley with bracket and plastics rope
- LD 50 radial damper for WVS 6 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 WVS 6 wire rope and tensioning device for supporting rope
- 5 m of WS 6 wire rope and 5 m of steel rope Ø 3 mm (supporting rope)



ORDER INFORMATION STANDARD SETS DICTAMAT 50 WS-MFL

Description	Part No.
DICTAMAT 50 WS-MFL, 25 N	701025
DICTAMAT 50 WS-MFL, 50 N	701026

COMPONENTS & DIMENSIONS

All dimensions in mm

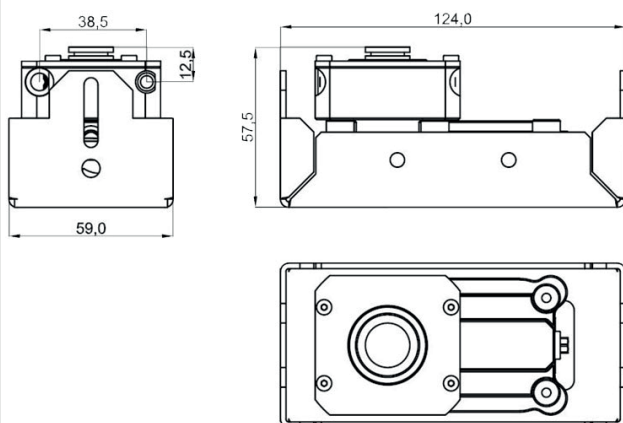
Mounting bracket/Freewheel carrier, LD Radial damper

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 attachment 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 the front of the bracket.

Mounting bracket DICTAMAT 50 WS

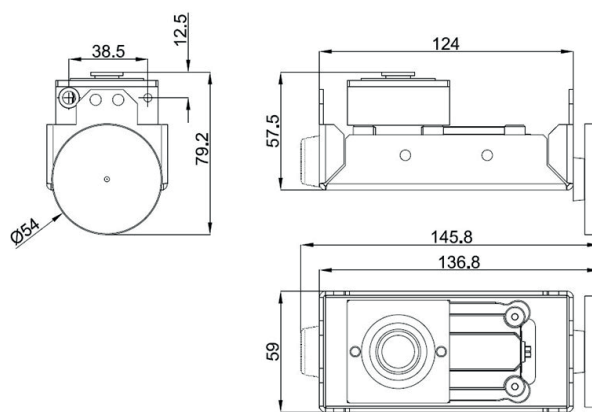
Part no. 701040 Material: zinc-plated steel



Mounting Bracket/Freewheel carrier DICTAMAT 50 WS-M / DICTAMAT 50 WS-MFL

Part no. 701041 Material: zinc-plated steel

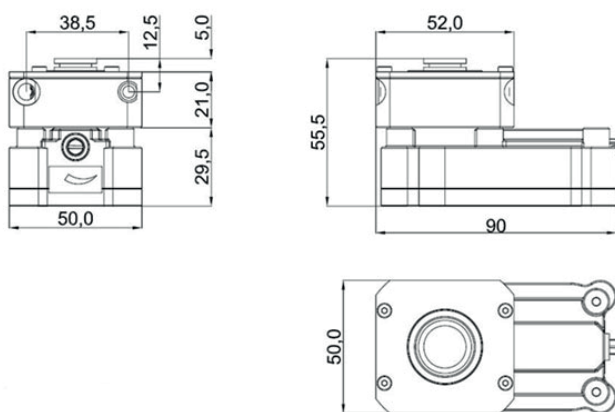
1) Rubber buffer, only in the DICTAMAT 50 WS-MFL



LD 50 WS Radial damper

Part no. 244080

Material casing: flame retardant DOMAMID plastics Material attachment for wire rope: zinc-plated steel



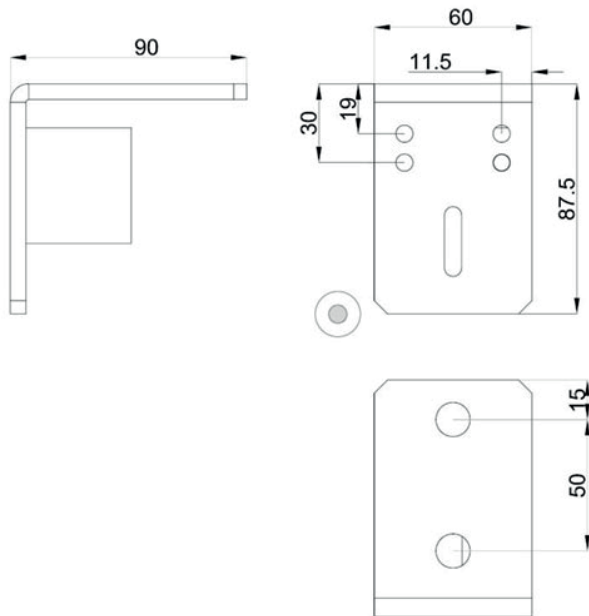
Bracket with wire rope tensioner and magnet

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 VWS-M and VWS-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.

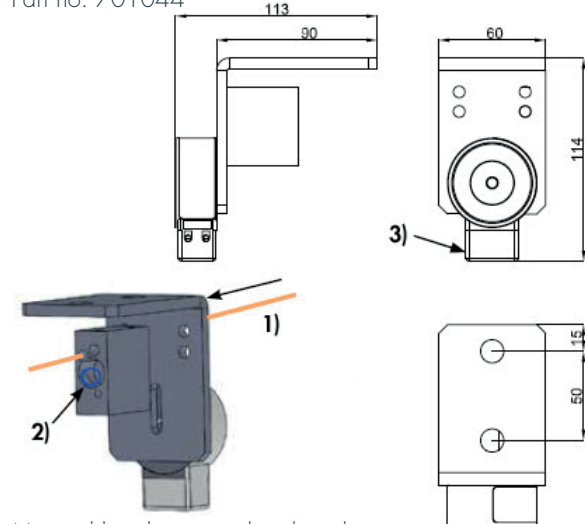
Bracket with wire rope tensioner

Part no. 701043 Material: zinc-plated steel



Bracket with wire rope tensioner and EM GD 50 Q 23 electromagnet

Part no. 701044



Material bracket: zinc-plated steel

Material wire rope tensioner: aluminium

Material wire rope: steel

1) Wire rope to be introduced in the tensioner

2) Wire rope tensioned by turning the SW 6 Allen screw

3) 24 VDC power supply of electromagnet

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.

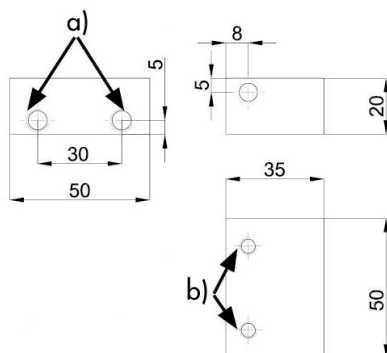
The version with freewheel carrier combines the clamp piece with an additional rope tensioner for the supporting rope.

Clamp piece for wire rope

Part no. 701047

a) M8 fixing borings

b) M6 attachment screws for wire rope

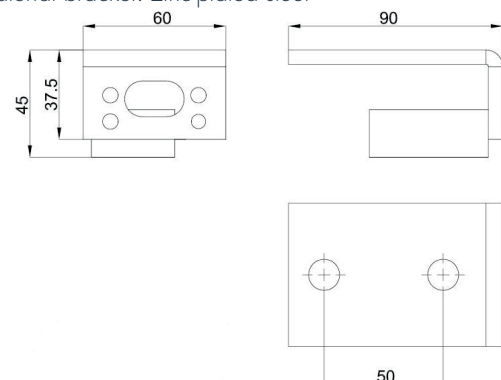


Clamp piece with bracket

Part no. 701048

Material clamp piece wire rope: aluminium

Material bracket: zinc-plated steel



Clamp piece for wire rope with supporting rope tensioner and bracket

Part no. 701049

Material clamp piece wire rope: aluminium

Material bracket: zinc-plated steel

Material rope tensioner / steel rope: zinc-plated steel

