

Radial Dampers

Fully Adjustable, for Constant Damping

DICTATOR provides **two** different **types** of radial dampers for the control and the damping of rotating and linear movements over long distances:

- Lamellar radial dampers LD
- Radial dampers RD 240/241

They are ideal for avoiding high mass forces. They control and reduce speed during the whole travel of moving objects, e.g. sliding doors and gates, of sledges or carriages in machine construction. All types can be adjusted continuously. DICTATOR radial dampers damp in both directions, but usually they come with a free wheel in one direction.

The patented lamellar radial dampers LD are characterized by their small basic dimensions combined with high performance and the possibility to individually adapt them to requirements of the customers.

Information about the radial dampers approved for their use on fire protection sliding doors and gates can be found in our Fire Door Operators catalogue.



Overview

Radial dampers LD 50	max. pivot moment 2 Nm
Radial dampers LD 100	max. pivot moment 5 Nm
Radial dampers LD	special models with differing damping according to customer's requirements
Radial dampers RD 240/241	max. pivot moment 8 Nm double radial damper: max. 12.2 Nm
Damping by	rope, chain (tensioned or revolving), toothed belt, rack and friction wheel (only RD 240/241), customised



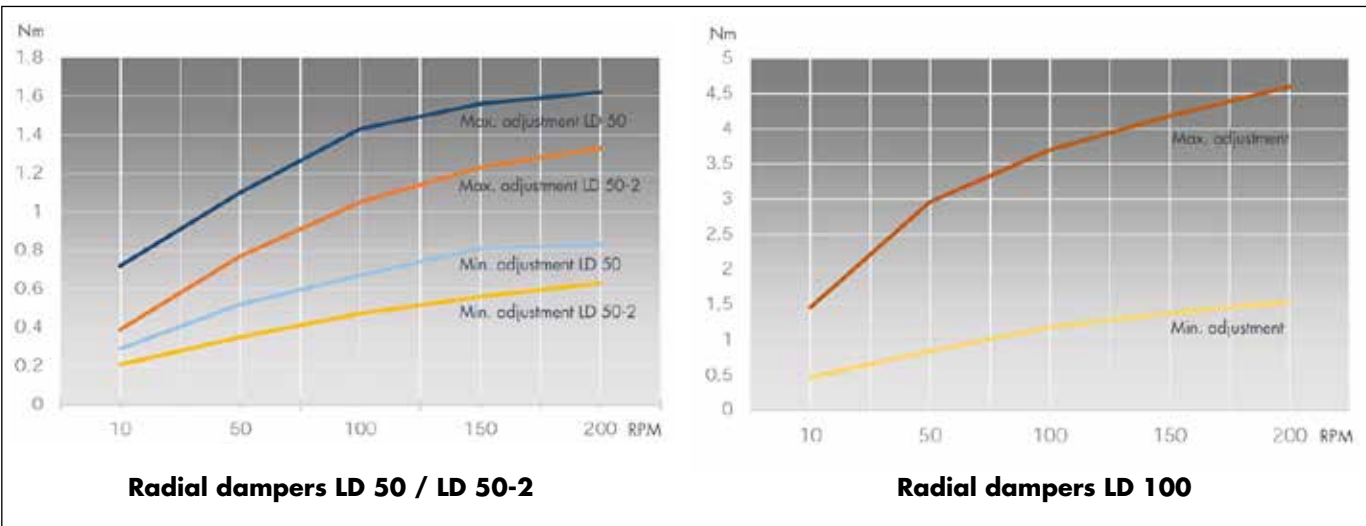
Technical Data Lamellar Radial Dampers LD

The two following diagrams inform about the damping force of the LD 50 and LD 100 series of the lamellar radial dampers. Both series differ in their height. The base dimensions are identical.

The patented lamellar construction allows by varying the height to realize also customised damping forces. This is also possible with small quantities as the damping characteristics don't depend on the material of the body. When there are special requirements regarding the damping forces or the material, the casing can also be made of aluminium or stainless steel for instance.

Damping Diagrams LD 50 / LD 100

The lamellar radial damper LD offers a very large adjusting range. In the diagram of the radial damper LD 50 are indicated two damping ranges. They are determined by the used oil. Therefore, on demand, also other damping ranges are possible.



Notes about the diagrams

The values shown in the diagram were determined in a standardized test environment.

Two factors here are:

- Installation of the lamellar radial damper vertically, adjustment screw points downwards
- Ambient temperature 22 - 25 °C

When the damper is used in actuality, the damping behavior can additionally be influenced by various external factors, so that the damping behavior in actual use may deviate from that shown in the diagram.

The lamellar dampers are not intended for continuous operation because they may overheat, which has a negative effect on its durability. The temperature of the damper, which is influenced by ambient temperature, actuation frequency, speed and the settings of the control (damping power), should preferably not exceed 50°C on the outside of the housing.

Technical Data

Operating temperature -15° up to +40 °C

Material casing LD Aquamid (glass fibre reinforced, flame resistant; standard)
other materials as aluminium or stainless steel on demand

Versions LD rope pulley, chain wheel, toothed wheel, others on demand



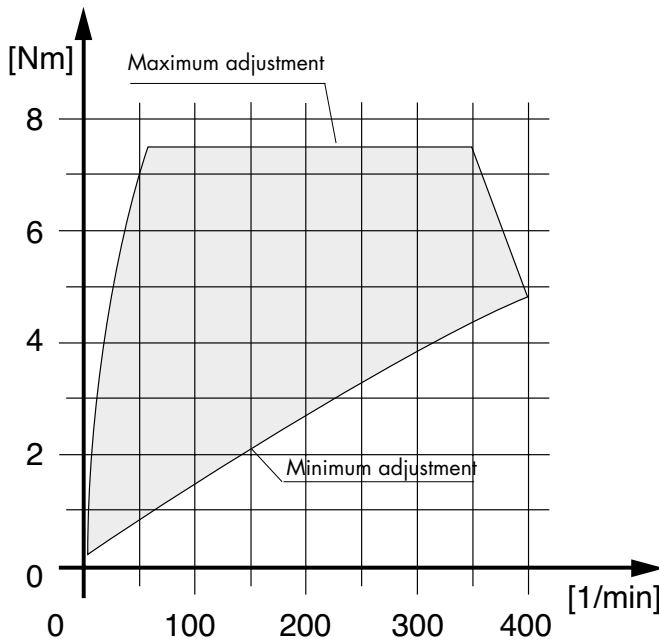
Technical Data Radial Dampers Series RD 240/241

The damping forces of the RD 240/241 series can be seen in the two following diagrams. Most of the RD 240/241 models have been tested for their use on fire sliding doors. The body of this series is made of aluminium. Therefore they allow a slightly higher duty cycle than the lamellar radial dampers LD.

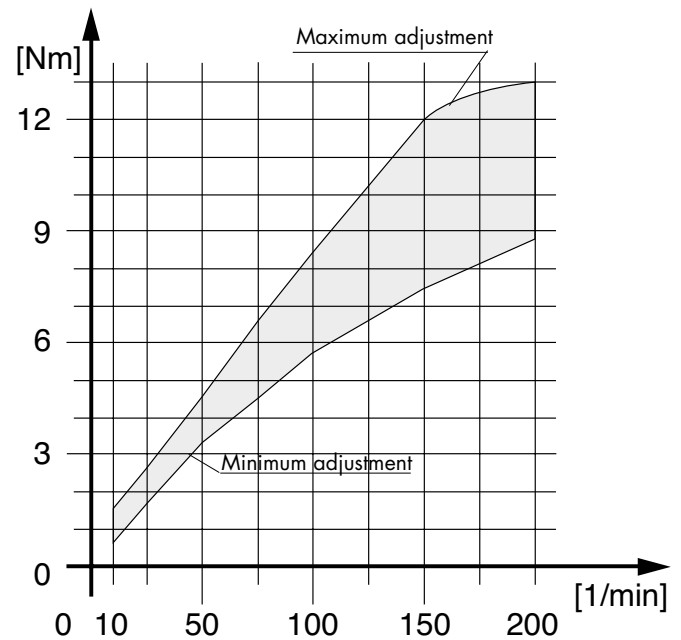
Detailed information about the different standard models can be found beginning on page 03.057.00. On demand, other models are available.

Damping Diagrams RD 240 / 241

The radial dampers of the RD 240/241 series are available in two strengths. The double radial damper is higher, the dimensions of the base, however, correspond to those of the RD 240/241.



Radial dampers 240 / 241



Radial dampers 241024 / 241030
("double radial dampers")

Technical Data

Operating temperature	-15° up to +40 °C
Duty cycle*	standard approx. 50 %
Material casing	aluminium
Versions	chain wheel, rope pulley, friction wheel, toothed wheel

*Duty cycle: the duty cycle of a door that is being damped during closing and is always moving, i.e. opening and closing permanently, is 50 %, as the radial damper works only during closing.