



## Installation and Operating Instructions

### Radial Dampers

#### For continuous damping of inclined gates with running rack

The radial dampers with gearwheel, model 4 (16 teeth) and model 6 (12 teeth) have especially been designed for sliding gates being usually opened and closed by a door drive unit with the help of a rack. For safety reasons a radial damper should be fitted on all ascending gates to control the closing speed over the complete distance in the event of power failure.

As these radial dampers are mainly used at the outside they are rust resistant.

The radial damper is fixed to the door post or near the drive unit. The geared wheel must be in mesh with the rack transmitting the power from the drive unit.

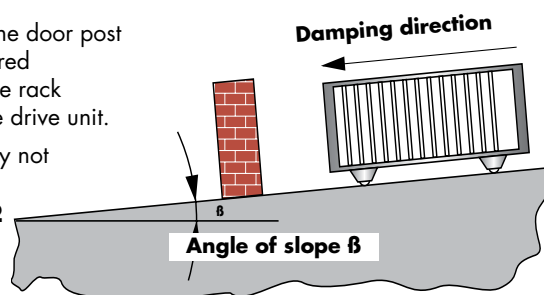
The load on the damper  $M$  may not exceed 7 Nm:

$$M \text{ [Nm]} = G \times \sin \beta \times 0.032$$

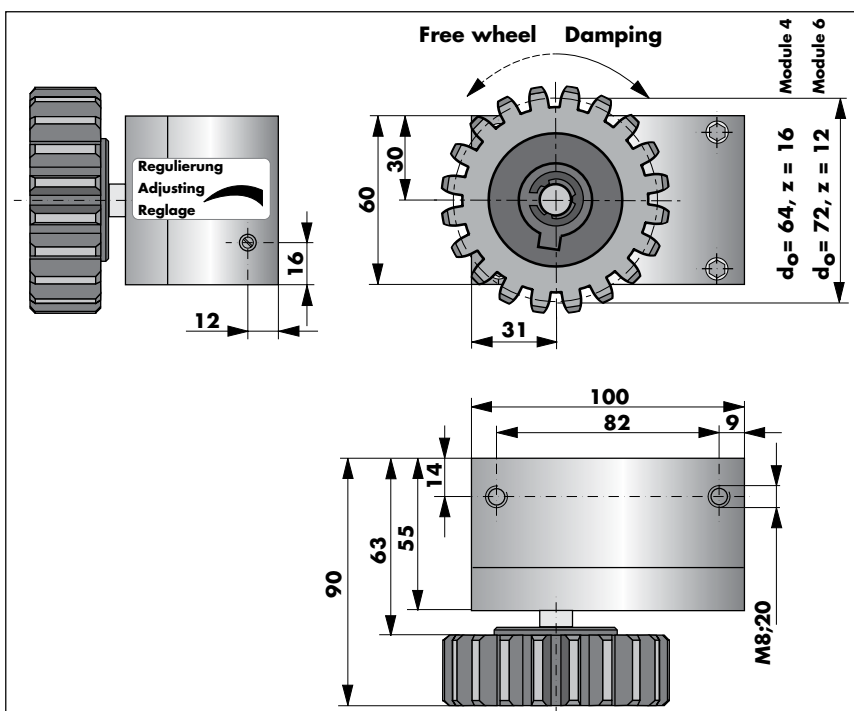
{  $G$  = weight of the gate in N  
 $\beta$  = ascent in degrees }

The diagram below shows the direction in which the toothed wheel usually rotates. You can change the damping direction by removing the lock washer from the axle and taking off the toothed wheel. Now it is put back on the axle the other way round and secured again. Take care not to damage the inner shaft seals which protect the free wheel.

The closing speed can continuously be varied by the adjustment screw.



## Dimensions



## Order Information

Radial damper with toothed wheel module 4 (Ø 64, 16 teeth)	part no. SMC
Radial damper with toothed wheel module 6 (Ø 72, 12 teeth)	part no. SMC-HD



## Double Radial Dampers Heavy-Duty

The double radial dampers offer higher damping forces than the normal radial dampers (the damping moment is 12.2 Nm). The total dimensions change but slightly: only the height increases by 19 mm.

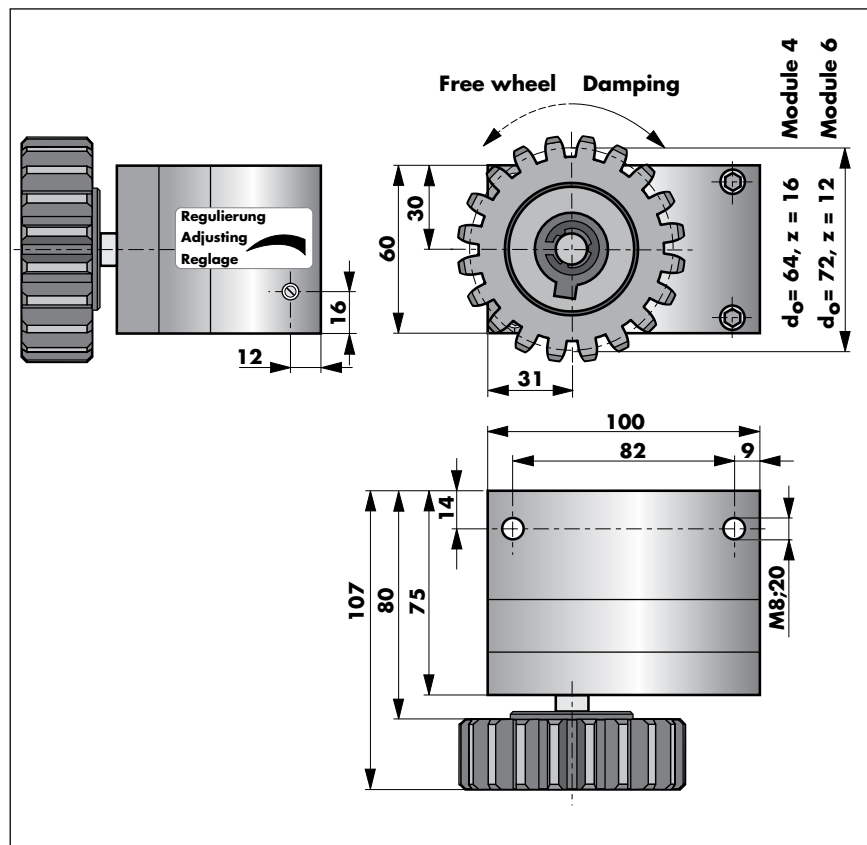
On demand the double radial damper is also available with a pulley for steel rope or with a normal toothed wheel.

## Installation and Operating Instructions

The diagram below shows the direction in which the gearwheel usually rotates. You can change the damping direction by removing the lock washer, taking off the wheel and then placing it back on the axle the other way round. Make sure you put the lock washer back on again.

The closing speed can continuously be varied by the adjustment screw.

## Dimensions



Double radial damper with gearwheel module 4 ( $\varnothing$  64, 16 teeth) part no. SMC

Double radial damper with gearwheel module 6 ( $\varnothing$  72, 12 teeth) part no. SMC-HD