

VEKTOR INERTIA BRAKES

1) Mounting

It does not require more expenditure to install the inertia brakes (safety bearings) than to build in standard type bearings which, however, are not required when applying the inertia brakes.
Below we are giving you some directives to facilitate their proper installation:

- a) install the inertia brake always and principally at the side opposite to the drive.
- b) mount the inertia brake in such a way that the arrow on the inertia brake is showing in unrolling direction of the shutter door curtain.
- c) the shaft studs must in any case be welded centrically to the bearing barrel, because any tumbling motion will induce the inertia brake to react immediately.
- d) pay attention to the drive chains which are to be kept properly tightened in order to prevent a jerky start which otherwise could also induce the inertia brake to react.
- e) proper lateral guides of the rolling shutter door curtain as well as a smooth connection of the individual profiles of the roller door curtain to each other is of much importance too.
- f) use some lubricant when putting the inertia brake onto the shaft to ensure that this can be done easily.
Do never try to put on the inertia brake by force!
- g) in any case, attention is to be paid to the torque of the drive motor which may not exceed the capacity of the inertia brake.
- h) do not fail to connect the limit switch - if the inertia brake is provided with such one - and make sure that the drive of the door is cut off if said switch is actuated.

2) Testing

- a) According to the „Directives for power operated windows, doors and gates“ such windows, doors and gates are to be inspected and tested before their first operational use and afterwards according to requirements, but at least once per year.
- b) Such tests can be carried out as outlined below:

Visual Inspection:

- a) the visual inspection is recommended to check whether the fastening screws on the brackets and on the casing covers are still in their position and properly tightened
- b) check moreover whether the fastening bolts are still in their proper position and whether they are properly tightened.
- c) also check whether corrosion attack has possibly caused essential changes of the static range.
- d) check the limit switch mounted on and make sure that the same is still secured by 2 fastening screws so that it will work properly in case of reaction.
- e) the straining screw of the built-in damping (shock absorption) is secured by a lock nut which is tightened with a certain torque. Moreover, this pre-adjusted lock nut is sealed and marked in RED. Check during the visual inspection whether the said sealing remained undamaged.

Performance Checks:

The inertia brakes must also be checked by listening both during the forward and backward movement of the rolling shutter door to find out whether or not the drop noise of the catch rolls can be heard clearly.

3) Maintenance

The inertia brakes are maintenance-free thanks to the use of anticorrosive materials and to the application of ball bearings with permanent greasing.

4) Re-Adjustment of the Inertia Brakes of type RD/with damping (shock absorption)

The inertia brakes of type RD (with shock absorption) are provided with a built-in check that blocks the movement in either direction if they are not properly adjusted. Upon reaction of the inertia brake, the drive is cut off by the limit switch that is mounted on the inertia brake. To re-adjust the inertia brake, just loosen the locking screw at the top and turn back the inner ring together with the cover until the mark „OBEN“ (that means „TOP“) is reached. The top locking screw is to be tightened then again with a torque spanner - and please do not fail to seal this locking screw again with RED varnish. Torque spanner adjustments should be as follows:

TA O-RD/Z	8 Nm	TA 3-RD	50 Nm	TA O-RD/X	15 Nm
TA O-RD/F	12 Nm	TA 4-RD	80 Nm	TA O-RD	10 Nm
TA 1/2-RD	20 Nm	TA 5-RD	140 Nm		
TA 2/3-RD	37 Nm	TA 6-RD	240 Nm		

Thereafter the inertia brake of type RD (with shock absorption) is fully usable again.