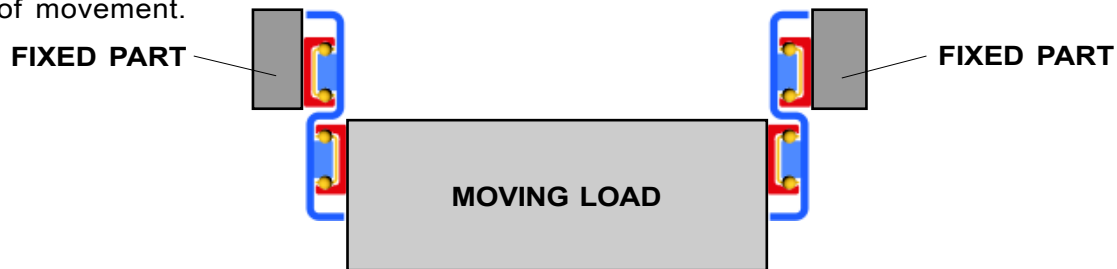


TECHNICAL APPLICATION SUGGESTION

All rails from the DS, DE, DBN, and LTF44 series should be applied only for horizontal movements due to the weight of the intermediate member. For DS and LTF44 series slides, the applied loads should act along the vertical axis of the slide section. For DE and DBN series, the applied loads can act along either horizontal axis. **DS and LTF44 rails must always be mounted in such a way that the moving member is always beneath the fixed member for a gravity based load** (see figure below). If mounted in the opposite manner, these slides could present problems including poor quality of movement.



Semi-telescopic rails like the **ASN** series can be used in vertical applications as long as the applied stroke is equal to the maximum stroke of the slide and the stroke length is constant and not variable. The endstops and pins in the **ASN** rails are designed to stop the moving, unloaded slide from disassembling. External endstops must be added to properly block a moving load.

The **TELESCOPIC RAIL** slides can be used for repeated, **continuous movements as needed in automatic systems** provided that the strokes are constant and not variable for the whole work cycle. The speed of these applications must always be verified against the chart on the previous page. The movement of these slides is provided by a ballcage which, if the repeated strokes are of variable lengths, can occasionally drift from its original position. This phase displacement would cause a stiff or difficult movement and could limit the stroke length. If the application does have variable stroke lengths, the means of actuation must be dimensioned so that enough strength to “rephase” the slide is provided. Alternatively, if the stroke is variable, a full-stroke cycle must be included at regular intervals to ensure that the ballcage of the slide does not eventually drift.

To provide the best functionality and lifetime relative to the applied load, smoothness of movement, and rigidity, **it is important that the slides be mounted using all of the mounting holes to a rigid, plane structure**. If two rails are used it is important that they are mounted on parallel surfaces. The fixed and moving members will assume the rigidity of the mounting structure. The intermediate element is a structural member.

Although the slides have pins that stop the movement when not loaded, the pins are not designed to stop a moving loaded slide. External endstops should be used to stop the movements. (While the endstops on the DS slides will stop a slide propelled manually, adding external endstops will certainly be beneficial). Please consult our application engineering department for more information.

TEMPERATURE

The slides from the **DE, DBN, LTF44, and ASN** series can be used in atmospheres with temperatures reaching +170°C (+338°F) (over 130°C [266°F] it is necessary to use a high temperature grease). Slides of the **DS** series have rubber endstops which allow them to be used in temperatures ranging from -30°C (-22°F) to +110°C (+230°F).

ANTICORROSIVE PROTECTION

All of the **TELESCOPIC RAILS** are protected with **electrolytic zinc coating as per ISO2081**. If the atmosphere requires stronger protection, it is possible to supply the slides with chemical nickel coating and stainless steel ball bearings.

LUBRICATION

In normal working conditions, it is recommended to lubricate the slides at least **every 50,000 cycles** although this depends heavily upon the actual conditions and atmosphere of the application. For critical working conditions, the slides must be lubricated more often. Before lubricating, the raceways must be cleaned free of any dirt and debris. With the slide in the open position, distribute a sufficient quantity of **lithium-based, medium consistency grease** on the races and then in the spaces between the ball bearings.