Ball chain

Rexroth recommends using a ball chain particularly in applications calling for low noise levels.

Ball runner blocks can be equipped with a ball chain (1) as an option. The ball chain prevents the balls from bumping into each other and ensures smoother travel. This reduces the noise level. The lower number of load-bearing balls in ball runner blocks with a ball chain, mean that lower load capacities and load moments can result ("Product overview with load capacities and load moments").



Seals

The sealing plate (2) on the end face protects the ball runner block internals from dirt particles, shavings and liquids. It also reduces lubricant drag-out. Optimized sealing lip geometry results in minimal friction. Sealing plates are available with black standard seals (SS), beige low-friction seals (LS), or green double-lipped seals (DS).

Low-friction seals (LS) (seals with very low friction)

The low-friction seal was developed for applications requiring especially smooth running with minimal lubricant drag-out. It consists of an open-pored polyurethane foam and has only limited wiping action.

Standard seal (SS) (universal seal with good sealing effect)

The standard seal is sufficient for most applications. It offers good wiping action while still permitting long relubrication intervals.

Double-lipped seal (DS) (seal with very good sealing effect)

Rexroth recommends using double-lipped seals in applications in which the ball rail is heavily covered with swarf, wood dust, coolants/lubricants, etc. It has an excellent wiping action with a higher level of frictional drag and lower relubrication intervals.

Sealing action and resistance to movement

The resistance to movement is influenced by the seal's geometry and the material it is made of. The diagram shows the effect of different seal variants on the sealing effect and the displacement resistance.



