

# Linear slides

## Structure



All linear slides consist of an outer rail with a runner moving inside. Anti-friction bearings, kept at a distance and in position by means of a ball cage, lie between the rail and the runner.

Rail and runner are made of heat treatable steel, enabling their use in industrial environments with higher requirements in terms of load rating, quiet operation and useful service life.

All designs are available in the nominal rail dimensions  $h_1 = 28, 35$  and  $43$  mm and may also be supplied beyond the standard range in lengths from 130 mm to 1970 mm, appropriate for individual requirements.

Linear slides are normally adjusted so that a clearance-free (i.e. moderately pre-stressed) match-up is created between rail and runner. The raceways of the rails and runners are induction hardened, which combined with the antifriction bearings results in lower wear and longer service life. Linear slides are permanently lubricated with a high-grade special grease designed for linear guide rail systems.

Depending on requirements, a variety of different types are available. Sliding distances of the runners are inside, partly outside or entirely outside the length of the rails. Fully extendable telescopic linear slides consist of linear slides directly interconnected at the rails, the runners or with the help of an intermediate profile.

To mount linear slides, countersinks in the rails and, depending on type of construction, threaded or countersunk holes in the runners are available. The compact style is generally advantageous for use in tight spaces.

