Modular Roller Track and Ball Rail Assemblies

Details on Load Capacity



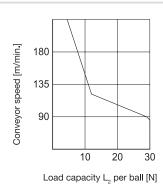
Load capacity of individual components

Roller track with:	Load L ₁ per track Carrier rail profile making continuous contact	Load capacity L ₂ per individual roller / ball
Roller track GN 646.1-270-15-PA	13330 N/m	200 N
Roller track GN 646.1-270-27-PA	13330 N/m	360 N
Roller track GN 646.1-270-15-TPU	1333 N/m	20 N
Roller track GN 646.1-270-27-TPU	5550 N/m	150 N
Ball track GN 646.2-270-POM	850 N/m	30 N

Within the loads given in the foregoing table, the permanent deformation or deflection of the roller / ball track is prevented, so the safe and proper function is guaranteed.

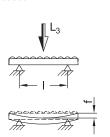
Conveyor speed

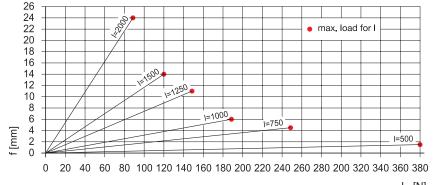
For ball tracks GN 646.2, conveyor speed must also be taken into account. If the speed is exceeded, the load capacity L_2 / per ball may be compromised.



Load and deflection

If carrier rail profiles GN 646.3 (→ page 2011) rest on two points only, deformation (deflection) under load L₃ must be taken into account.





 $L_3[N]$

The diagram shows the different values for which neither a permanent deformation of the carrier profiles nor an impairment of the proper function of the roller track may be expected.