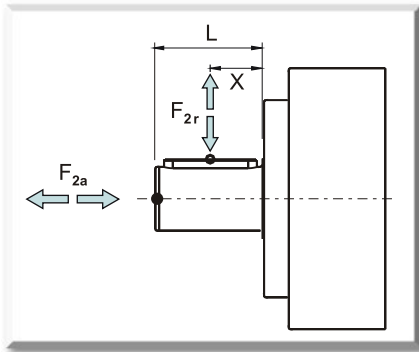
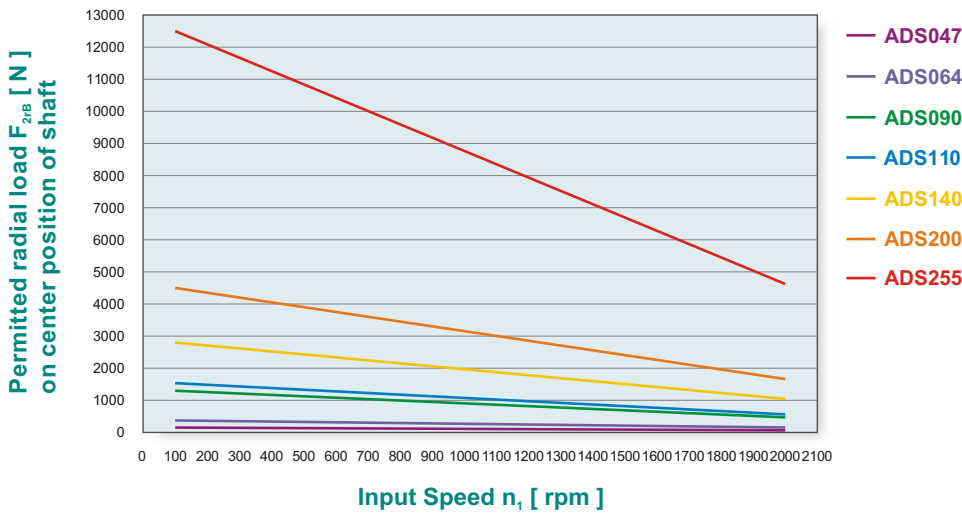


# Permitted Radial and Axial Loads on Input Shaft of the ADS Gearbox

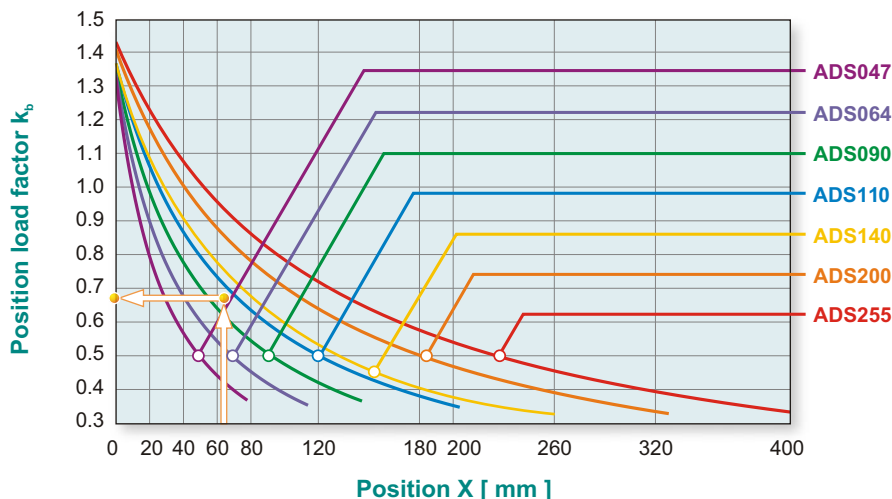


The permitted radial and axial loads on input shaft of the gearbox depend on the design of the gearbox supporting bearings. APEX use deep groove double roll ball bearing design. It can take heavy load from both axes.

$F_{2r}$  Radial Load  
 $F_{2a}$  Axial Load



If radial force  $F_{2r}$  exert on the center of the input shaft  $X=1/2 \times L$ . Under various operating condition the lifetime is over 30,000 hours\*. The permitted radial load is given on left diagram.



\* Continuous running reduces service life by 50%

If radial force  $F_{2r}$  not exert on the center of the input shaft  $X < 1/2 \times L$  or  $X > 1/2 \times L$ . The permitted radial and axial load can be calculated by the position load factor  $k_b$  on the left diagram.