



E Type High Performance Racing Series

Spherical and Rod End Bearings Self Lubricating

The **E Type High performance Racing series** has been Developed for the Racing Car and Commercial Industries Using technology evolved from NMB Minebeas' experience as leading supplier to the Aerospace Industry. Investment in modern manufacturing methods ensure that this high quality product is offered at competitive cost. All bearings in the range Incorporate the latest "Rose" Type "D" enriched long life liner system which has been developed for the new generation of Aerospace bearings.

These **E Type High Performance Racing Series** bearings are precision made, having a specially designed rod end profile to maximise load carrying capacity without raising stress concentration. Particular attention is paid to a high degree of Interface finish between the ball and liner.



Standard Series

The following data sheets show dimensional and loading details for the **E Type High Performance Racing Series**. For sizes and options not shown please contact NMB Minebea UK Ltd or our agent.

Loads

The maximum static radial load for a spherical bearing is based on the projected area of the liner and its maximum Permitted bearing pressure.

The maximum static radial load for a rod end is calculated from the cross sectional area of the head or thread, Depending on which is the lesser, and the 0.2% proof strength of the material.

The maximum dynamic radial load is defined as the load at which a maximum wear of 0.0045 in (0.11 mm) is Allowed over 25,000 cycles.

A cycle is defined as rotational reversing swept movement of +/- 25 ° about a datum, total movement 100 ° at room temperature.

Temperature

The operating temperature range of these bearings is -50 °C to + 160°C.

Maximum temperature is 200°C at reduced bearing pressure for short periods.

Angles of misalignment

The angles of misalignment for these bearings are consistent with maintaining full bearing area. Greater angles can be achieved providing that a reduction in bearing area and hence a reduction in load carrying capacity can be Tolerated.