

Integral Bearing Seals Information

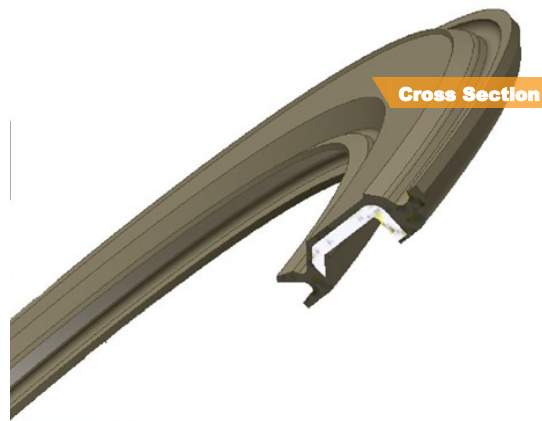
Integral Bearing Seals



- > **Direct replacement for standard OEM seals**
- > **Reduced temperature**
- > **Low friction**
- > **Multiple lip designs**
- > **Down to 1mm thick**

Race-Tec Sealing produces custom designed and optimised seals for F1 ceramic bearings and to replace existing integrated OEM seals used in standard wheel hub bearings found in many “formula” type race cars, including the highly competitive Formula 3 series.

These side plate seals are manufactured with controlled lip forces providing optimal racing seal performance with minimum friction. They are supplied as direct replacements for the standard part and are simply clipped/pressed onto place to provide a low friction retrofit seal that can be very similar in structure and appearance to the original item.



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Performance Features

Materials

Dependant on grease type and operating temperature range, any of the following compounds may be used: Nitrile (NBR), Hydrogenated Nitrile (HNBR), Fluoroelastomers (FKM).

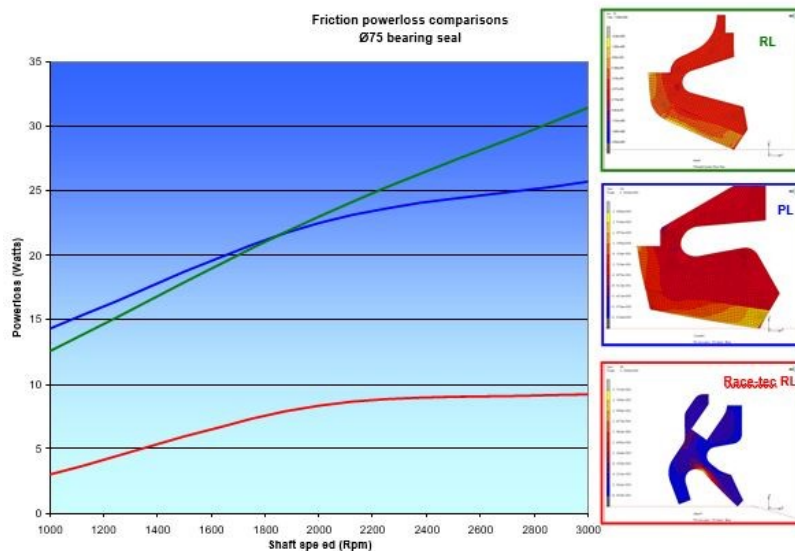
Technical Features

Individually engineered for use with angular contact ball bearings or hub units, the low friction seals feature special seal designs and materials to provide optimum racing performance.

Finite Element Analysis (FEA) is used to optimise lip geometry, ensuring that water and road/brake debris is excluded while the lubricating grease is retained and kept free from contaminants.

Seals are manufactured to precision tolerances using specifically developed compounds with some styles incorporating a low friction bonded PTFE liner.

Comparison of bearing seal technologies



Applications

Race-Tec Sealing integral bearing seals are used in all forms of motorsport and have been fitted into ceramic bearings in the higher levels and conventional steel bearings for others.