PEEK cages for High Speed cylindrical roller bearings

High Speed super precision cylindrical roller bearings, especially for motor spindles, are available with a cage made from PEEK (polyether ether ketone) (suffix PVPA1). Since displacement on the nonlocating bearing side of motor spindles only ever occurs in one direction, the cage can be guided on one side, which leads to a more rapid grease distribution cycle with lower maximum temperatures and subsequently to a lower temperature level with smaller scatter, see section Super precision cylindrical roller bearings, page 68. As a result, the non-locating bearing function is more reliable even in the highest speed ranges. The maximum operating temperature of PEEK cages is +150 °C.



