BALL BEARING SKF BEARINGS MANUFACTURED BY ELECTRICAL EROSION

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ABSTRACT: Bearings for rotary motion bearings fall and bearings. It differs if the forces between moving parts are sent by rolling or sliding elements. Bearings generally consist of two rings embedded runways. Rolling bodies are disposed between the ring and roll on the raceways. Rolling bodies have different shapes such as balls, cylindrical roller, needle, tapered roller and spherical roller. The cage of the rolling bodies guided by the right, to keep them at a distance of each other and prevent them reaching. Needle bearings and aligning those with central ridge, further ensures proper orientation cage rolling bodies.

KEY WORDS: bearings, electrical erosion materials.

1. INTRODUCTION.

At camps dismantled, cage keeps bodies running together and thus facilitate mounting bearings. For special applications and use ball bearings, needle roller and cage free. Standard material is sheet steel cages for some applications and brass sheet. Cages are solid brass, steel, thermoplastics or other materials. Very common are the cages of thermoplastics, especially those of glass fiber reinforced polyamide. The guide rings and the rolling bodies are made in particular from steel with high chromium content, heat-treated steel and a case hardening. At special camps for extreme conditions - load, speed, temperature, corrosion - the commodities are sealing lip. Requests predominantly radial bearings are called radial bearings. Most applications support combined radial bearings, for example, groove ball bearings, thrust ball bearings radial, tapered roller bearings or spherical roller bearings. Type cylindrical roller bearings N and NO, most needle bearings, needle sleeves and rings can upload only these radial direction. Another feature is the guide shaft to the bearing. Thus, there are bearings which allow axial movement, bearings that guide the shaft in the axial direction in one or both directions and the bearings which allow the angular misalignment between the shaft and the housing. In determining bearing size consider
steel, plastics, ceramics, and other materials resistant to temperature and / or steel. Bearings are provided in the open version, and sealed on one side or on both sides. The most common types are those with fissure relative motion. At low oscillating or requests at rest is considered as static requested. External dimensions identical roller bearings generally support more stress than the Ball bearings.

Fig. 1. Machine is manufactured by electrical erosion AQ-900.

Fig. 2. Material SKD11
Deep groove ball bearings are designed to take mainly radial loads. They are used for a wide range of applications. Consequently, they are available in many variants.
Fig. 5. Deep groove ball bearings Single row SKF.

Fig. 6. Deep groove ball bearings SKF double row

Fig. 7. Deep groove ball bearings SKF self-aligning

Fig. 8. The table electrical erosion parameter values

Fig. 9. The graph electrical erosion parameters.

Fig. 10. The electrical erosion parameter values.
Fig. 11. Link between the parameters erosion plants.

Fig. 12. Electrical erosion productivity parameter values.

Fig. 13. The table parameters electrical erosion.

Fig. 14. The reporting of productivity parameters electrical erosion.

Fig. 15. The reporting of productivity parameters electric erosion.

Fig. 16. The reporting of productivity parameters electric erosion.
Fig. 17. The reporting of productivity parameters the electrical erosion.

Fig. 18. The table parameters the electrical erosion.

Fig. 19. 3D representation parameters of the electrical erosion.

Fig. 20. The table parameters under various graphic shapes.

Fig. 21. The electrical erosion parameters the table.

Fig. 22. 2D shape parameters the electrical erosion.
Fig. 23. The table parameters in the form of 2D electrical erosion

Fig. 24. The shape 3D graphics parameters electrical erosion

Fig. 25. The electrical erosion parameters

Fig. 26. The form 3D graphics parameters electric.

Fig. 27. Reporting of the electrical erosion productivity parameters.

Fig. 28. Reporting of the electrical erosion productivity parameters.
Fig. 29. The productivity curve and other parameters of electrical erosion.

Fig. 30. The table parameters electrical erosion

Fig. 31. The productivity the reporting of to other parameters

Fig. 32. The curves electrical erosion parameters

Fig. 33. The parameters the curves the electrical erosion.

Fig. 34. Impulse time expressed as a percentage.
3. CONCLUSIONS.

Each bearing type has its characteristic properties and is suitable for various applications such as suspension. There are no general rules apply to choosing the type of bearing, because many factors must be evaluated and their mutual influences. Thus, in addition to load and speed, should be considered and temperature, lubrication, vibration, installation, maintenance. In many cases, at least one of the dimensions of the camp - often bore diameter - are already determined by sizing the neighboring building. Thrust bearings are suitable for applications predominantly axial. Spherical thrust bearings thrust bearings and angular contact ball bearings can take both axial and radial. The remaining axial bearings are only suitable for tasks in axial directions. If the gauge is limited radial bearings are chosen such low section eg needle cages, needle sleeves with or without inner ring, ball bearings or spherical bearing different types. Cages are used for axial loading axial needle bearings, thrust needle or Ball bearings.

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