

Welcome to the family: Wire Race Bearing LER 1.5

The new LER1.5 complements the series with an extremely compact variant.



Comparison of cross sections:

The decisive difference between an ordinary ball bearing and a Franke wire race bearing lies in the raceways. With wire race bearings, the rolling elements do not run on massive housing rings, but on hardened wires. The flexibility of this principle allows more freedom and simplicity to design in order to develop better products. Thanks to their patented technology, Franke wire race bearings offer maximum design freedom without having to compromise on load capacity. The enclosing structure can be realized in a variety of lightweight materials and its geometry can be optimally adapted to the respective application.

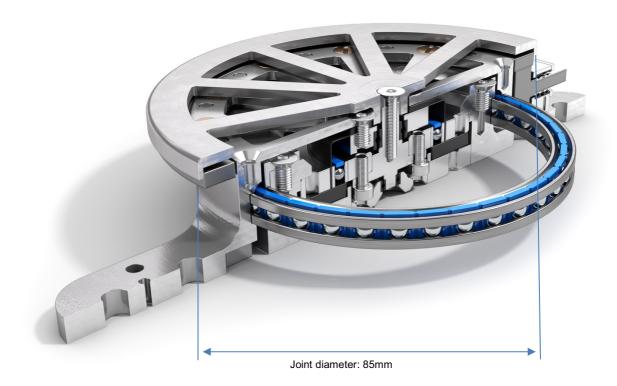
Franke bearing elements of the LER type are suitable for medium rotational speeds and accuracies. They impress with their smooth running, high dynamics and compact mounting space. The straight contact surfaces result in simple integration into the mating structure and high rigidity. The low price makes the LER type bearing element an economical solution. LERs are usually installed without play. Depending on the requirements, the preload can be set individually.

The new LER1.5 series was specifically developed for use in ultra-compact applications such as HRC robots or medical devices. The new LER 1.5 with its installation space of just 5x6 mm also meets the trend towards miniaturization in the handling and automation area. Small turntables, grippers or manipulators can be moved precisely and with a high load capacity.



Application exsample: Franke bearing element LER 1.5 in the joints of an exoskeleton

In view of demographic change and the increasing shortage of skilled workers, it is a major challenge for the economy to keep employees in the work process as long and healthy as possible. Physically strenuous work that strains muscles, bones and joints is explicitly to be considered here. Exoskeletons can help. They are already being used for heavy loads or awkward postures. Think of warehouse workers, painters, plasterers or assembly line workers. Wire race bearings are very compact and light. Especially the types of the LER series stand out here. Simple assembly and adjustment of the preload are also added. The freedom from the center of the bearing allows the gear unit to be accommodated centrally. The large outer diameter ensures high rigidity.



Produt features (●●●● = best)	
Running	•••
Precision	•••
Speed	••••
Stiffness	••••
Easy mount	••••
Price	••••

Technical data bearing elements type LER

Material: Race rings: hardened sttel, 54SiCr6,

Balls: steel 100Cr6, Cage: PA12 / TPU

Operating temperature: -30 °C to +80 °C, briefly up to +100 °C

Circumferrential speed: max. 10 m/s

Lubricant (recommended): Shell Gadus S3 V220 C2

Further information: www.franke-gmbh.com

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