

GUIDE ELEMENTS

SOLUTIONS FOR YOUR TOOLS AND APPLICATIONS



MEMBER OF THE LÄPPLE GROUP

ELAPPLE

2021.45.

FIBRO Retainer ring for guide pillars with collar

ONE WHO KEEPS HIS PROMISE ...

In installation situations with high loads, the provided retaining elements for guide pillars with flange are sometimes at their limit. The reinforced retaining elements are the remedy (2071.45). However, due to the differing pitch circle diameter, they are not easily replaceable. The new FIBRO retaining ring (2021.45) offers the required stability and, thanks to the identical drill pattern, offers a 1:1 alternative to simple standard retaining elements (207.45.).





OUR SOLUTION TO MEET YOUR NEEDS

- Improves the stability of a guide pillar with flange with side loads
- In the case of a guide pillar with flange in a top plate, it is kept in position with greater reliability
- Identical drill pattern provides for a quick and easy replacement of the standard retaining elements 207.45

MORE INFORMATION



www.fibro.com

2061.69. .1 / 2081.69. .1 **FIBRO** Recirculating ball bush ~ISO9448-3 / Recirculating ball bush with collar ~ISO9448-7

ALWAYS A GOOD ALTERNATIVE ...

For long travel distances with moderate loads, recirculating ball bushes are an excellent alternative to ball guides.

Due to the ball circulation, the steel balls rolling on guide surfaces between the guide pillar and the bush are returned by a return run in the bush opposite the direction of movement and fed back to the guide surfaces again. This makes an unrestricted stroke possible; the limiting component in this case is the available installation space, not the guide element.

Not only the recirculating ball bush (2061.69.) but also the recirculating ball bush with flange (2081.69.) are optimal for use of a large number of FIBRO guide pillars*. This allows them to be used in a wide range of applications in mechanical engineering and tooling, in automatic production machines, in machine tools and in tool and mold making.

^{*}Please observe the notes on the catalog sheet and the selection matrix.





2061.69. .1

FIBRO Recirculating ball bush ~ISO9448-3

2081.69. .1 **FIBRO** Recirculating ball bush with collar ~ISO9448-7



OUR SOLUTION TO MEET YOUR NEEDS

- The possible travel distance (stroke) is limited only by the installation situation
- The high number of ball tracks permits a higher load compared to products offered by out competitors
- Longer life due to the 2° slanted arrangement of the ball tracks - each ball runs on a separate track on the guide pillar/shaft

MORE INFORMATION



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www.youtube.com

2060.6x.

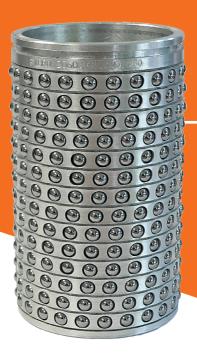
FIBRO Cage unit, aluminum

WEIGHED AND DEEMED TO BE LIGHT ...

For faster accelerations and stroke speeds, cage units made of aluminum present an alternative to those made of brass.

The aluminum that is used has a lower density than brass, which results in lower inertial forces when accelerating or braking. They occur during stroke movements of stamping dies at the reversing points (bottom dead center and top dead center) and are the main reason for the frequently occurring position changes of the cage units between guide pillar and bush. This so-called "Wandering" is minimized by the use of aluminum cage units.





2060.6x. **FIBRO** Cage unit,

OUR SOLUTION TO MEET YOUR NEEDS

- Lower weight compared to brass cage units
- The higher number of balls results in a longer life and load rating and thereby lowers your costs
- A variety of possible combinations of guide pillars and bushes for a broad application spectrum

MORE INFORMATION



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2060.41.

FIBRO Ball cage with circlip groove, plastic

WHEN IT HAS TO BE QUICK ...

For very fast accelerations and stroke speeds, cage units made of plastic are the best choice.

The POM plastic that is used has an even lower density than aluminum and brass, which results in even lower inertial forces when accelerating or braking. They occur during stroke movements of stamping dies at the reversing points (bottom dead center and top dead center) and are the main reason for the frequently occurring position changes of the cage units between guide pillar and bush. This so-called "Wandering" is nearly eliminated when using plastic cage units.





2060.41. **FIBRO** Ball cage with circlip groove, plastic

OUR SOLUTION TO MEET YOUR NEEDS

- Even lower weight compared to aluminum cage units
- The high number of balls results in a long life and load rating and thereby lowers your costs
- A variety of possible combinations of guide pillars and bushes for a broad application spectrum

MORE INFORMATION



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202.94. **FIBRO** Cage retainer

FULLY FLEXIBLE EVEN WHEN INSTALLED ...

For cage units, the lead length must be determined exactly in advance by the designer, which is then often not optimal when installed. The cage unit (202.94.) for the first time provides the option of changing the lead length when already installed and thereby an exact and individual customization to meet your demands. Due to its rugged design, it is ideally suited for use in transfer tools. During overhauls, the tool tops with "hanging" guide pillars are often placed on the guide pillars or the cage unit, which requires maximum robustness. The cage unit is available for nominal diameters from 30 mm to 80 mm*.

^{*}Notes on the fitting guide pillars and possible pairing are provided on the catalog sheet.





OUR SOLUTION TO MEET YOUR NEEDS

- Individually adjustable cage lead length in installed condition for optimal function
- No special cage units required, because can be used with standard cage units
- Long life and low upkeep costs thanks to the stable and robust design

MORE INFORMATION



www.fibro.com



FIBRO GmbH

Business Unit Standard Parts GERMANY T +49 6266 73-0

THE LÄPPLE GROUP