



FLEXIBLE CONNECTION

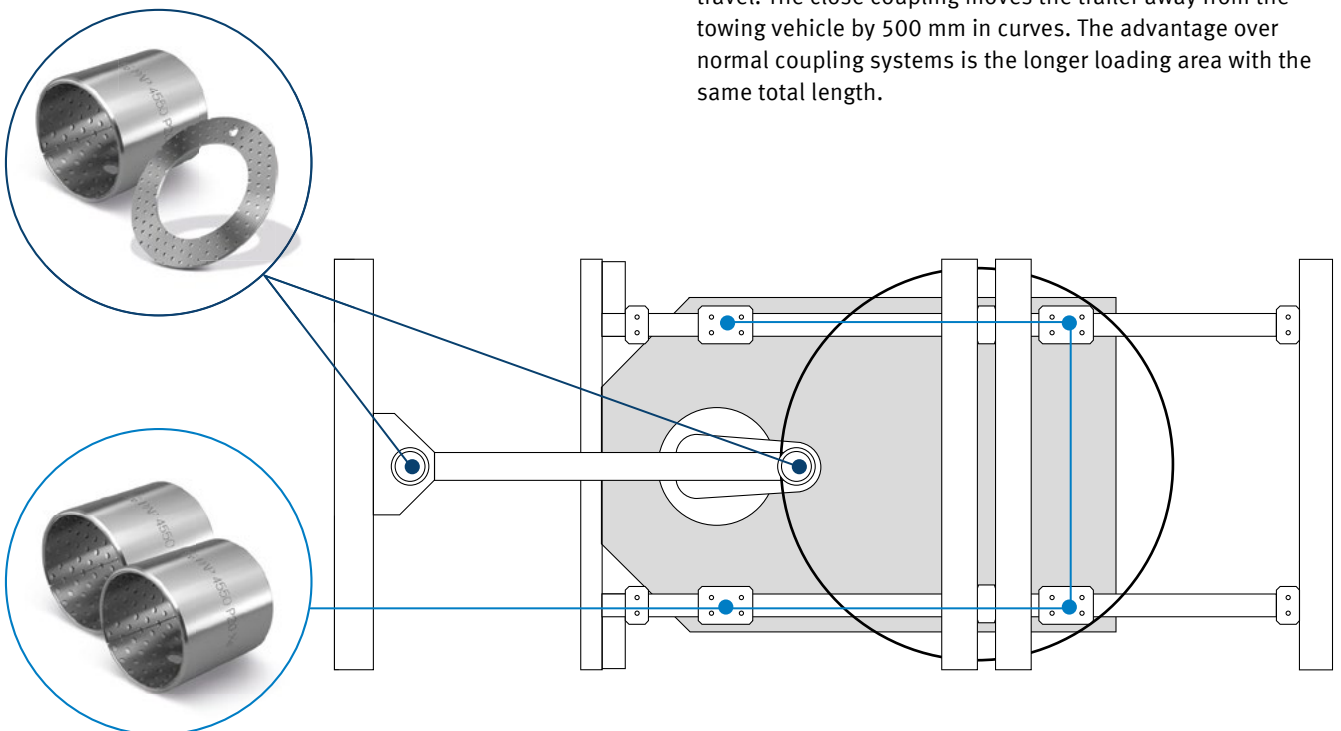
Close coupling system of semitrailers | Utility vehicle production

PRODUCTS USED

KS Permaglide® plain bearing bush design PAP ... P20
 KS Permaglide® thrust washer design PAW ... P20
 Material: KS Permaglide® P20

FUNCTION

Close coupling systems are used between the trailer and towing vehicle on semitrailers. The distance between the trailer and towing vehicle is extremely small during forwards travel. The close coupling moves the trailer away from the towing vehicle by 500 mm in curves. The advantage over normal coupling systems is the longer loading area with the same total length.



The bridge is twisted in relation to the trailer in curves. The twisting of the bridge is transferred to the ring gear. The ring gear engages in a ring gear ring on the crank disc. The connecting rod is fastened with bearings on the trailer and on the crank disc. This means that the crank mechanism is adjusted in every curve. The trailer is moved backwards on linear guides.

BEARING WITH KS PERMAGLIDE® P20 PLAIN BEARING BUSHES AND THRUST WASHERS

In the close coupling system of semitrailers, KS Permaglide® P20 plain bearing bushes are used for the linear guide. There are two rigid shafts running on the trailer in two KS Permaglide® P20 plain bearing units each. The plain bearing bushes are pressed into the connecting rod. KS Permaglide® P20 thrust washers are used for the axial bearing.

ADVANTAGES OF KS PERMAGLIDE® P20 PLAIN BEARING BUSHES AND THRUST WASHERS

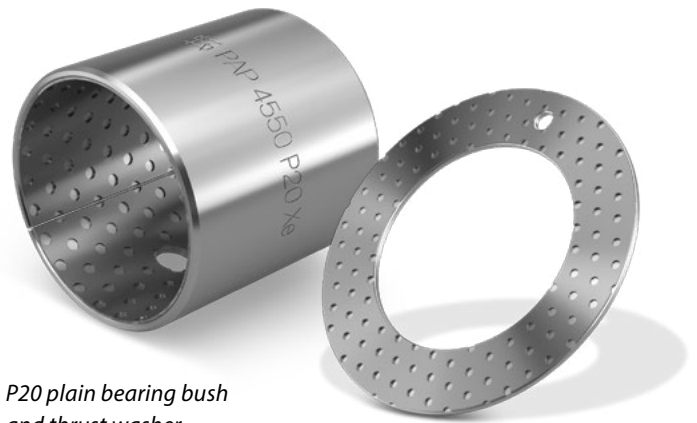
- High wear resistance
- Highly stressable
- Insensitive to shocks and impacts
- Insensitive to dirt and moisture
- No tribocorrosion
- Smooth running
- Good damping characteristics
- Low-maintenance operation with lubrication

DESCRIPTION OF MATERIAL

KS Permaglide® P20 is a low-maintenance, high-performance leaded bearing material. The material is designed for grease-lubricated or liquid-lubricated applications.

This composite, multi-layered material excels thanks to its high rigidity, durability and resistance to oscillation and vibration. These characteristics are largely achieved by a sliding layer system made of polyvinylidene fluoride (PVDF), polytetrafluoroethylene (PTFE) and lead. The wear-resistant material has already proven itself many times in industry.

The standard KS Permaglide® P20 version features oil distributing pockets as per DIN ISO 3547. The bearings are provided ready to install for recommended connection-design installation dimensions. Also available are versions with a different wall thickness, suitable for rework when installed, or with a smooth sliding surface for hydrodynamic applications.



P20 plain bearing bush and thrust washer

CONTACT

info@de.rheinmetall.com

Phone: +49 62 27-5 60

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