



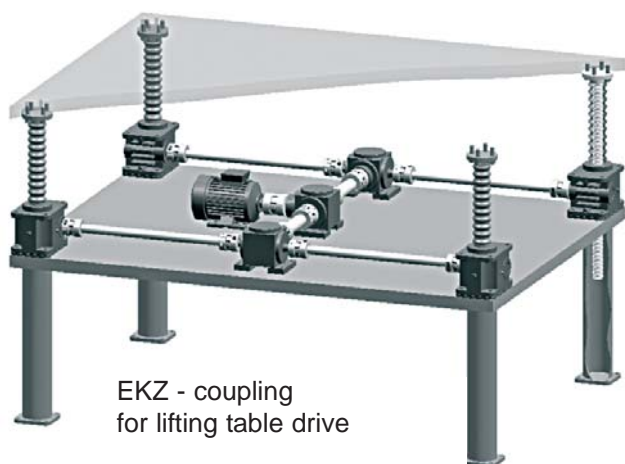
This category comprises several coupling series which can span axial distances of up to 6 m of length. The common main characteristic feature of all types is an intermediate pipe resp. a metal bellows part, which is variable in length and can fit exactly the required applications of the customer. In many cases, they can be used as spacer shaft (synchronizing shaft) and can substitute conventional constructions of intermediate shafts with complicated additional intermediate bearings. Misalignments, especially parallel misalignments, can be compensated to a higher extend. Furthermore the stainless material and the easy assembly of all series must be emphasized. A secure, frictional connection with easy operation is given because of the hub design in half-shell version (series WB, WBA, KLH) resp. with sliding hub (series EKZ).

Characteristics:

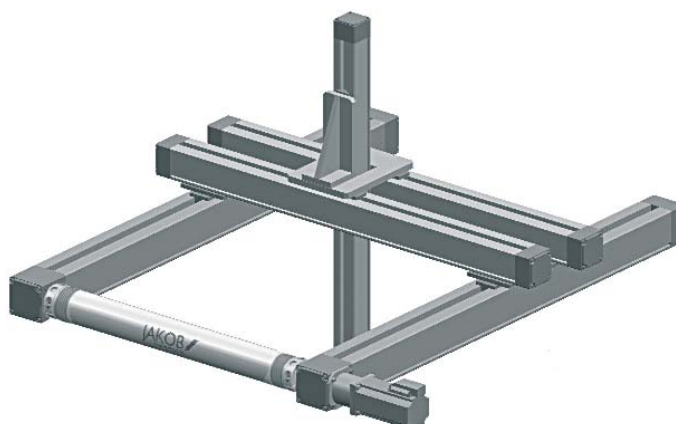
- as connecting shaft without additional intermediate bearing - maintenance free
- high torsional stiffness - compensation of displacements - very easy to fit - high speed
- up to 6 m axial distance - backlash free, exact torque transfer - stainless design

The customer can chose between three standard series with aluminium intermediate pipe:

- **Series EKZ** • length 0,2 - 3 m • 6 sizes up to 700 Nm • Tmax=120°C • elastomer spider • plug-in sliding hub
• oscillation dampening • cost effective type for medium speed
- **Series WDS** • length 0,2 - 6 m • 7 sizes up to 1600 Nm • Tmax=300°C • metal bellows • integrated cardan joint
• great pipe dimensions for maximum speed • high torsional stiffness • pipeconnection detachable
➔ in-house production of the intermediate pipe is possible
- **Series WDE** • length 0,2 - 3 m • 5 sizes up to 500 Nm • Tmax=140°C • metal bellows • integrated cardan joint
• cost effective type with reduced operating parameters



EKZ - coupling
for lifting table drive



WD - Coupling
for multi-axis linear module

Distance couplings assembly

The splitted hub-, or the shifting hub design allows for an easy assembly. Further simplification during installation is provided because one half of the split hub is screwed onto the pipe. This allows that the coupling can rest on the two shaft ends. The second half of the split hub can be then mounted to the coupling by screwing it on from below with the specified tightening torque. This feature makes a "one man assembly" possible even with extremely long couplings. During maintenance, the WB coupling can be exchanged without disassembling the drive or output units.

Notice: The maximum allowed speed is dependent of the total length L and the pipe dimensions. At high rotational speed above 2000 min⁻¹ and simultaneous long dimension L > 2m please contact JAKOB.

Formulas for length determination:

$$L = A + t_1 + t_2 \quad [\text{mm}]$$

A = shaft separation ± 1
 t = plug in depth ± 1
 (see data sheets)

