

**Montage- und Betriebsanleitung
für Zugsattelzapfen**

D

**Mounting and operating instructions
for king pins**

GB

**Instructions de montage et d'utilisation
pour pivots d'attelage**

F

**Istruzioni per il montaggio e
l'uso dei perni d'articolazione**

I

**Instrucciones de montaje y
de utilización para king pins**

E

King pins are safety parts connecting the articulated unit and are (in certain countries) subject to type approval. It is essential that only original JOST spare parts are used. Any alterations invalidate the guarantee and the type approval. Parts which have been damaged or repaired (e.g. by welding) may not be used. When installing the king pins the relevant registration instructions must be adhered to, e.g. in Germany §§ 19, 20 and 21 of the StVZO (road traffic regulations).

The maximum D-value and the model number (e.g. series KZ10) can be found in the relevant data sheets resp. on the tip of the king pin itself.

The load data are valid for operation on paved roads and under conditions prevailing in central Europe. For alternative conditions please consult us.

The D-value can be calculated according to DIN standards 74080 and 74083 by means of the following formula:

$$D = g \times \frac{0,6 \times T \times R}{T + R - U} \quad [\text{kN}]$$

T = maximum permissible total weight of tractor [t],
(including U)

R = maximum permissible total weight of semi-trailer [t].

U = maximum permissible imposed load [t].

g = 9,81 m/s²

The model number of the king pin is made up as follows:

e.g.: KZ10 12

Thickness of retention plate, in this case 12mm
Model (series), in this case KZ10

JOST king pins are manufactured in accordance with the valid international standards, which stipulate amongst other requirements the length of the protruding king pin from the underside of the skid plate. Before the king pin is mounted onto the skid plate, please check both flatness and thickness of the skid plate. The tolerance in the flatness of the part of the skid plate in contact with the fifth wheel must not exceed 2mm. Sharp edges and protruding welding seams are not allowed. The skid plate must cover the supporting surface of the fifth wheel in every position.

Skid plate thickness tolerances in mm, except for model nos. KZ1106 to KZ1112 and KZ1116:

6 mm ^{+0,6} -0,1	7 mm ^{+0,6} -0,1	8 mm ^{+0,4} -0,3	10 mm ^{+0,4} -0,3	12 mm ^{+0,2} -0,5	16 mm ^{+0,3} -0,5
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Skid plate thickness tolerances in mm for model nos. KZ1106 to KZ1112 and KZ1116:

6 mm up to 16 mm ⁺⁰ -0,3
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When welding the retention plate resp. the tapered sleeve the following welding processes and filler materials are acceptable:

Welding process: E II
Filler material: E 4320 min. A5 DIN1913

optional

Welding process: MAG C or MAG M
Filler material: Grduct S-V5 green resp. S-V4 red (Messer Griesheim), Union K52 resp. Union 56 (Thyssen Draht AG) or E MK 7 resp. E MK 6 (Böhler)

or an alternative welding process and filler material approved by the Road Transport authorities.

The skid plate must be adequately reinforced according to the load.

The method and dimensions of the reinforcement are the responsibility of the trailer builder. In order to achieve sufficient stability we recommend a skid plate thickness of 12mm for 2" king pins and 16mm for 3 1/2" king pins (recommended material St 52-3).

The king pins must be installed centrally and at right angles. Tapered king pins must be hammered into place after cleaning the joining area, the castellated nut must then be tightened to the prescribed torque and secured by means of a split pin. **Mounting proposals and torque settings page 6 and 7.**



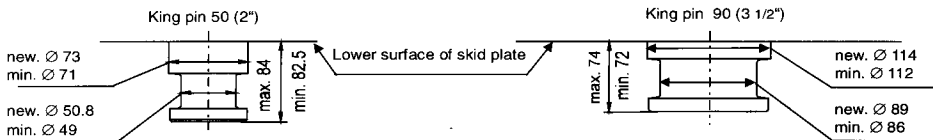
The bolted in king pins must be protected from welding spatter. After welding please check the bolts and (if applicable) nuts for correct torque. The contact and functioning surfaces must be protected before painting.

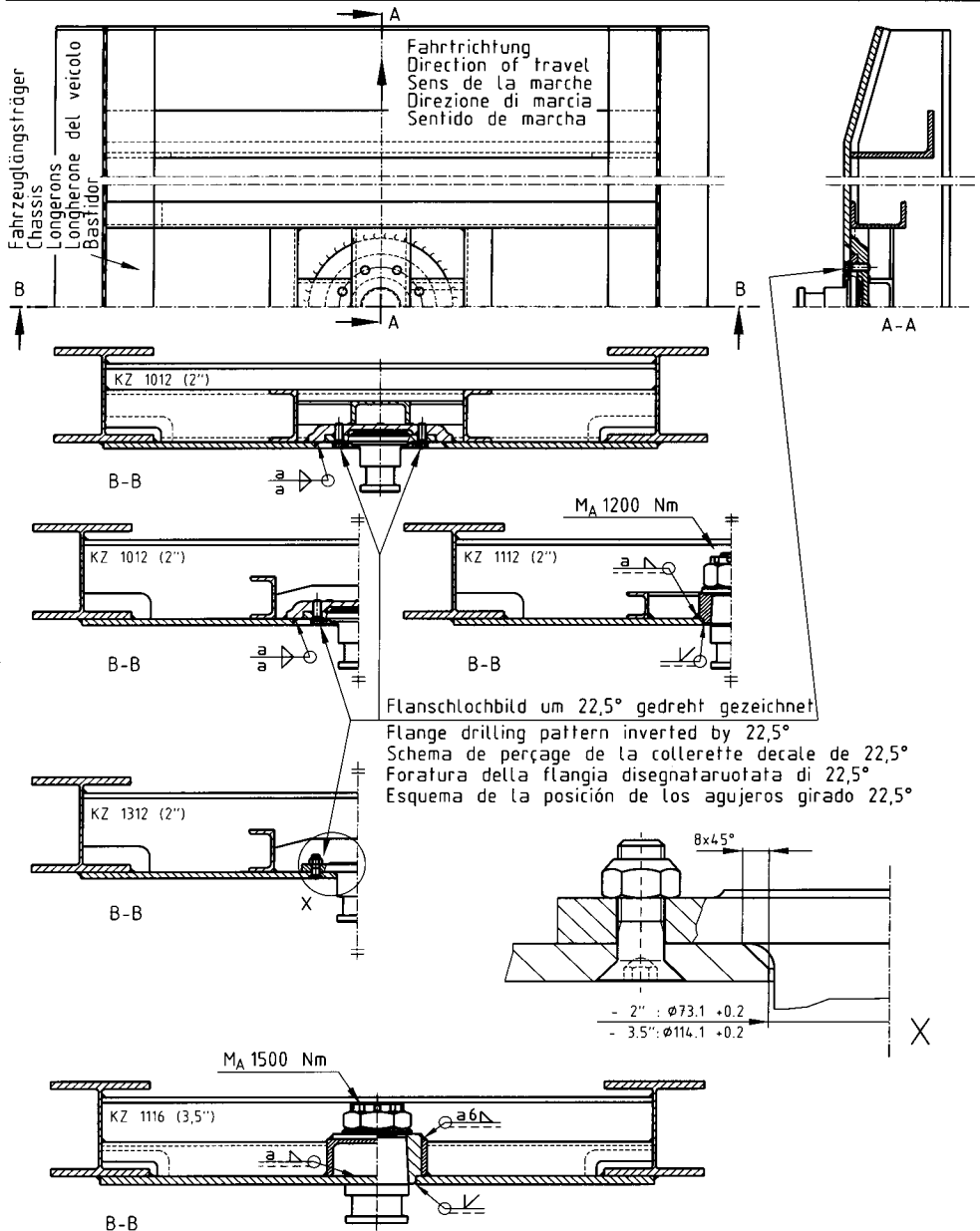
The king pins and their supports must be checked for wear, damage and cracks according to usage, but at the latest every six months, and replaced if necessary. The bolts and nuts must be checked for the correct torque.

Before being put into service the king pin, skid plate and locking mechanism of the fifth wheel coupling must be thoroughly lubricated with high pressure (EP) grease with MoS₂ or graphite additive (e.g. BP L21 M, BP HTEP 1, Esso universal grease M or Shell Retinax AM). The life span of the king pin and the fifth wheel coupling depend to a large extent on their adequate lubrication.

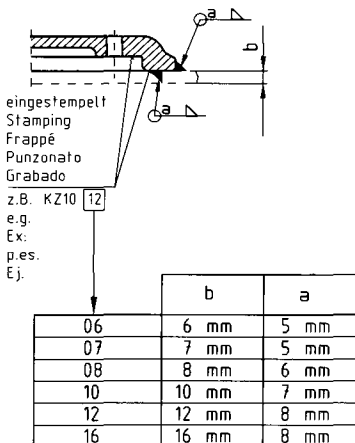
The king pin and the locking mechanism of the fifth wheel are subject to natural wear during operation. Once the limits of wear are reached, the king pins must be replaced by original JOST spare parts.

Limits of wear:





Erforderliche Schweißnahtdicke "a" zum Einschweißen des Aufnahmetellers / -konus
 Thickness of welding seam "a" for welding retention plate/cone
 Epaisseur des cordons de soudure "a" pour la cuvette ou la noix
 Spesso del cordone di saldatura "a" necessario per la saldatura delle flange e delle sedi dei perni conici
 Espesor de los cordones de soldadura "a" para la tapa y el casquillo cónico



Anziehdrehmoment
 Torque
 Couple de serrage
 Coppia di serraggio
 Par de apriete

Königszapfen-Typ King pin type Axe d'attelage Perno tipo King pin tipo	Schraube / Mutter Bolt / Nut Vis / Ecrou Vite / Dado Tornillo / Tuerca		Nm
	Art.-Nr. Part no. Référence Art.Nr. Referencia	Größe Size Dimension Dimensione Medida	
KZ 1006 - KZ 1012 KZ 1410 - KZ 1412	KZE 1012-03	M14x35	190±10
KZ 0906 - KZ 0912 KZ 1712	KZE 0912-06	M14x1,5	190±10
KZ 1416, KZ 2816	KZE 1416-03	M16x45	280±15
KZ 1016, KZ 1516	KZE 1016-06	M20x50	500±30
KZ 1312	KZE 1312-05	M14	120 $\begin{smallmatrix} +5 \\ -10 \end{smallmatrix}$