

# GUIDE TO TOWBALLS

To ensure safe travel and safe coupling using AL-KO stabilisers, the following guidelines must be adhered to:



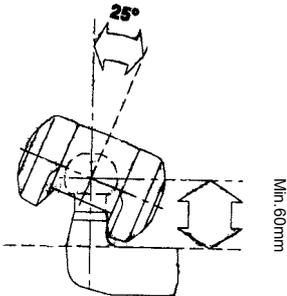
## Towball Specifications.

Towballs must meet Directive EC 94/20 (Din 47058)

The diameter of the ball must be 50mm (+0/-39mm)

There must be a minimum of 60mm depth from the centre of the towball to the base of the neck. This is for AL-KO stabilisers as apposed to coupling heads

There must be enough clearance between the centre of the ball and the base of the neck to enable the stabiliser to perform a 25° axial rotation movement.



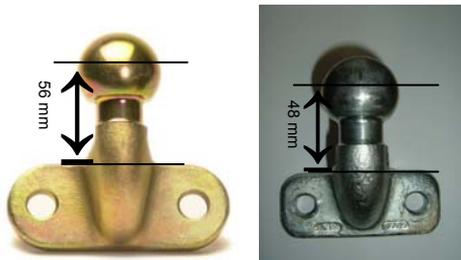
EC Standards also specify that stabilisers should be able to perform a degree of articulation as follows:

Horizontally = 60° to right and left

Vertically = 10° up or down

## TOWBALLS

There are many towballs on the market that are not suitable for use with AL-KO stabilisers as they do not have the necessary length of neck to allow the correct amount of axial rotation.



These balls should **NOT** be used with an AL-KO stabiliser. Use of this type of ball could result in the vehicles becoming in-hitched, your stabiliser being damaged and/or a very serious accident happening.

AL-KO Ball- correct



## TOWBALL HEIGHT

In all instances it is imperative that the correct towball height specification is met.

Caravan: 415mm +/-35mm

Car: 385mm +/-35mm

These measurements are taken on a level surface and represent the distance from the ground to either the centre of the towball or the centre of the coupling head. This requirement is part of EC regulations and must be adhered to.

## SWAN NECK TOWBALLS

Swan neck towballs are different in that their necks are long and tapered and give plenty of clearance for the stabiliser. They come in different shapes, sizes and styles.

With swan necks the measurement to look for is the clearance from the centre of the towball to the nearest point of contact with the vehicle. This should be a minimum of 65mm (AKS 1300), 67mm (AKS2004), 68mm(AKS3004), 60mm (AKS2700)



Bolt on 'fixed' Swan Neck



Detachable Swan Neck



Bolt on 'fixed' Swan Neck

## THINGS TO REMEMBER!

Towballs should have any paint or protective coating removed, right back to the bare metal, before they are used. Failure to do this could result in contamination of the friction pads. This could result in a stabiliser's damping effect being affected.

Due to friction when in use, any bits of paint or coating remaining on the ball can form to tiny. Almost ball-bearing like, deposits that will score or pit the ball. Replacement towballs for this reason are not covered under AL-KO warranty

No form of grease should be used on the ball with the AL-KO stabiliser. Drivers with diesel fuelled cars should ensure their towballs are cleaned regularly as diesel fumes can leave a slightly greasy deposit in them.

Before each journey AL-KO recommends that you lightly rub the ball with some fine grade emery cloth (100-120grade), and also the friction pads. This will keep any rust deposits or contaminates to a minimum and will optimize your stabilisers' performance.