

Eyeshafths

No specific legislation applies but the use of products complying with BS A.U. 24a 1989, which specifies the pin/hook and eye dimensions, together with throat clearances of the jaw to ensure adequate articulation, is strongly recommended.

The eyes normally used in the U.K. have an internal diameter of 30, 40, or 50mm and are used with either a towing jaw, a combination jaw/towball or occasionally a hook. There is also the 76mm Nato eye used by the Armed Forces, usually with a military style pintle hook.

The British eyeshafths have a round or toroidal section eye and are used with a parallel type pin with sufficient clearance in the eye to permit the correct sequence of towing on the pin and braking on the jaw. If the pin is too large or the clearance between the jaw and pin too great, then both towing and braking loads will be put onto the pin.

A 40mm DIN eye, commonly used in Europe, has a hardened steel bush fitted to the internal bore and is designed to be used with a special pin that has a bulbous or reinforced section, around which the eye can pivot. Because of this it is ESSENTIAL that a 40mm DIN eye is NOT used with a British style parallel pin, as the sharp edges of the bush will cause accelerated wear of the pin, with possible serious results. The incorrect combination can also often prevent full articulation of the eye within the jaw, leading to rapid coupling wear and possible chassis damage.

If a trailer of less than 3500kg gross weight is to be towed by an H.G.V. it is recommended that an eye is used in preference to a 50mm ball coupling. In this way the overrun coupling is better able to withstand the additional forces imposed on it by the harder suspension and possible extra overhang behind the rear wheels on the towing vehicle.