

## Tested and approved

All the Hella products listed in the catalogue have type approval according to the European ECE regulations for tested vehicle components and fully comply with the legal regulations. They are approved – without further approval procedures being necessary – for immediate installation in the vehicle.



Original xenon headlamp complete set from Hella

### Be careful – dangerous products!

Unfortunately, there are products – xenon retrofit products in particular – available on the market which are prohibited in the area governed by the Economic Commission for Europe (ECE Western Europe). Products of this kind endanger road traffic safety. For this reason, the general certification of a vehicle becomes invalid whenever these non-permissible retrofit sets are used.

### Dangerous and prohibited (using xenon as an example)

According to ECE regulation R48 and § 50, section 10 STVO (German Highway Code), only complete xenon headlamp systems may be retrofitted in Europe. These consist of a set of type-approved headlamps, an automatic headlamp levelling device and a headlamp cleaning system (mandatory regulation).

Unauthorized, illegal "conversions" of halogen headlamps to xenon are both dangerous and prohibited. Reason: this "DIY work" leads to glare being increased up to 100-fold – putting other road users in extreme danger.



Non-permitted retrofit kit

This means: The general certification of the vehicle is no longer valid, insurance protection is limited.

The reason: every headlamp is only granted its type approval together with the light source (halogen or xenon) with which it is intended to be operated. If this light source is exchanged for a light source that has no type approval or has not been designed for the type approval of the headlamp, the type approval is no longer valid and neither is the general certification of the vehicle (§ 19 STVZO (FMVSS), section 2, sentence 2, no. 1). Driving without general certification in turn leads to limitation of insurance protection (§ 5, section 1, no. 3 KfzPfV, German vehicle compulsory liability insurance regulations). Those who sell such lighting equipment without type approval must also reckon with damage claims from buyers. Because when passing on these parts, the seller not only takes over the guarantee that they may be used for the foreseen purpose, but possibly also the risks of damage, and that without an upper limit.

Completely legal, on the other hand, is the retrofitting of xenon headlamps such as the ones available from Hella as complete sets (type-approved twin headlamps, headlamp levelling device and headlamp cleaning system) – with the well-known advantages:

- More than twice the light output in comparison with halogen lamps
- Brighter and wider illumination of the road and light quality approaching that of daylight
- Hazards at the edge of the road or obstacles in front of the vehicle are recognised earlier
- Pedestrians and cyclists are more easily visible
- Xenon light emphasises contrasts and coloured vision
- Spatial vision is improved in poor weather conditions



### Pirates – not only at sea

Test marking on headlamps and combination rear lamps protects car drivers, garages and parts dealers from product piracy. If these standardised markings are not present, the products are very probably fakes. Protect yourself against illegal products! Rely on type-approved accessories from well-known brand manufacturers such as Hella.

How to read and understand the combinations of numbers and letters

**Example:** You find the following marking on the lens of an H4 standard headlamp:

HC/R.25 E1 02A 44457.

This means:

- H Halogen
- C Dipped beam light
- R Main beam light
- / The slash means the dipped beam and main beam light cannot be switched on at the same time.
- 25 Reference number that provides information about the luminous intensity of the driving lamp. The usual figures are: 10; 12.5; 17.5; 20; 25; 27.5; 30 and 37.5. The sum of all the driving lamps switched on simultaneously on a vehicle must not exceed the reference figure 75.
- E1 The headlamp has been approved according to the valid ECE regulation (E) in Germany (1).
- 02A There is a sidelight in the headlamp, the parking light (A), the regulation of which has been changed for the second time (02) since initial issue.
- 44457 The five-digit type approval number is issued individually for every headlamp design approval.

