

# ***Comparison of Classic and Performance Modules***

*90 mm, Main-Beam*

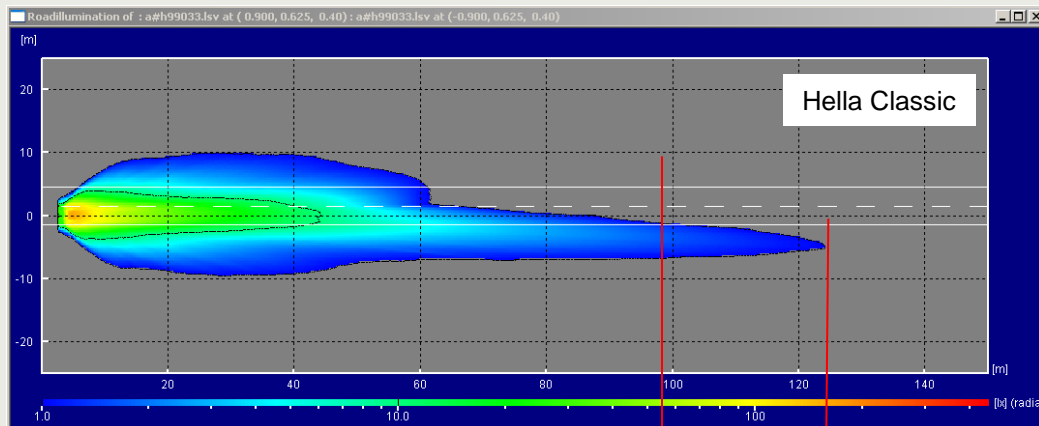
June 2009



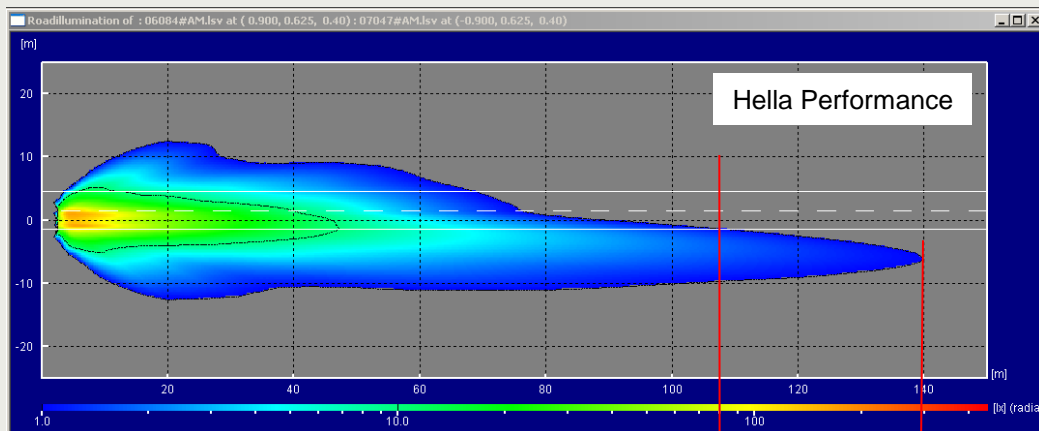
***Ideen für das  
Auto der Zukunft***

# Light distribution main beam

## Comparison of 90mm main beam modules Classic - Performance



123 m max. visibility distance (1Lux)  
98 m visibility distance (1Lux) on the road



139 m max. visibility distance (1Lux)  
108 m visibility distance (1Lux) on the road

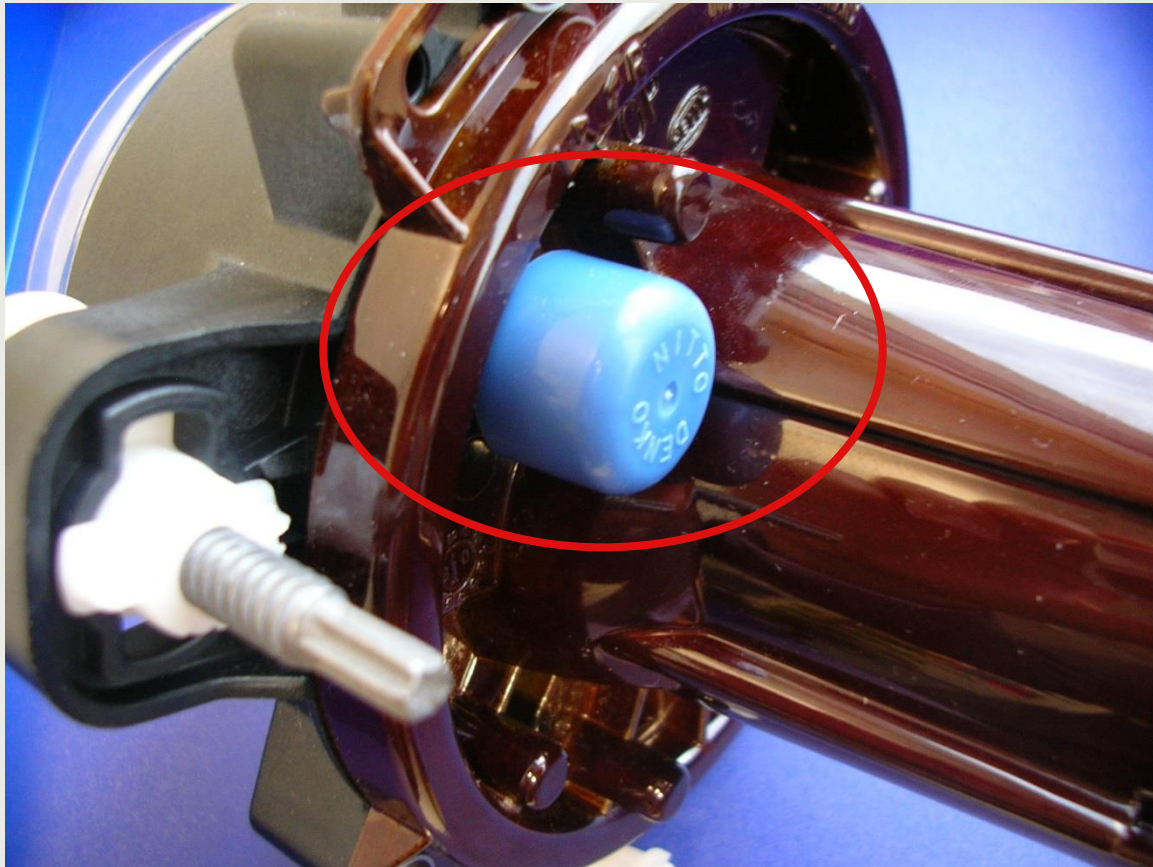
The light distribution of the new Performance Modules is based on state of the art light technology. The Hella Performance module has a longer visibility distance of about **16m** for max. visibility and up to **10m** on the road, based on state of the art light technology.

At 80 Km/h the vehicle moves 22 m/sec. So visibility distance is important for safety. A good visibility distance allow earlier detection of obstacles on the road or beside.

This corresponds to **0.7sec** additional time for reaction!

## ***Light distribution main beam***

### ***Comparison of 90mm main beam modules Classic - Performance***



The Performance Module has a Gore-Tex membrane for ventilation. It ensures, that no dust will find the way to the inside of the module.

## Light distribution main beam

### Comparison of 90mm main beam modules Classic - Performance



The Performance Module has a bayonett nut connector to ensure a simple exchange of the bulb. Water leakage due to wrong assembly of rubber caps is past.

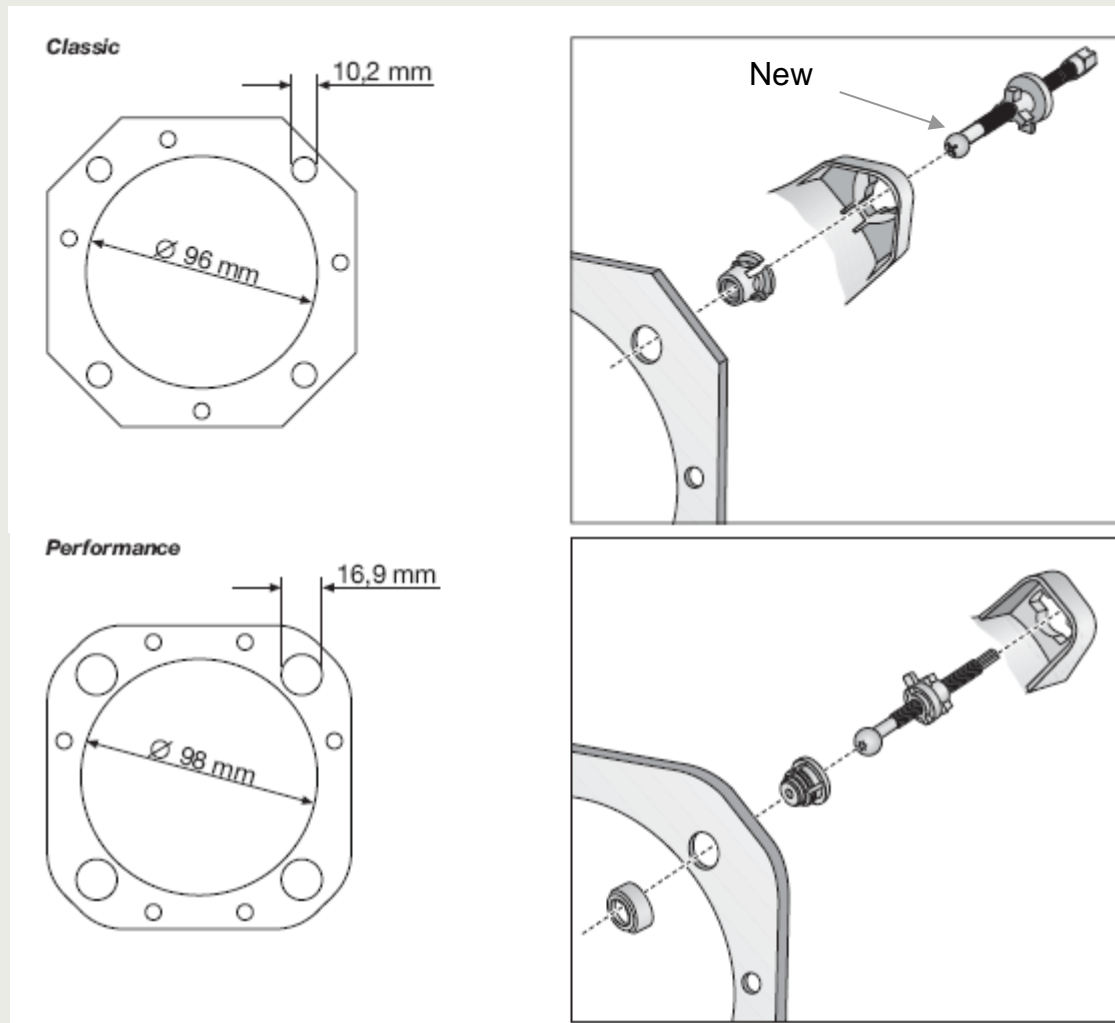




# Standard Fixation Concept 90mm modules

## Solution for Upgrade from Classic to Performance!

Available Feb. 2010



New screw necessary.

We will offer an additional Performance module with a new screw to enable customers a replacement of Classic modules with the new Performance modules without any changes to the vehicle.

The Classic fixing frame doesn't need to be changed.

The solution is only available for the target group Bus and Coach!