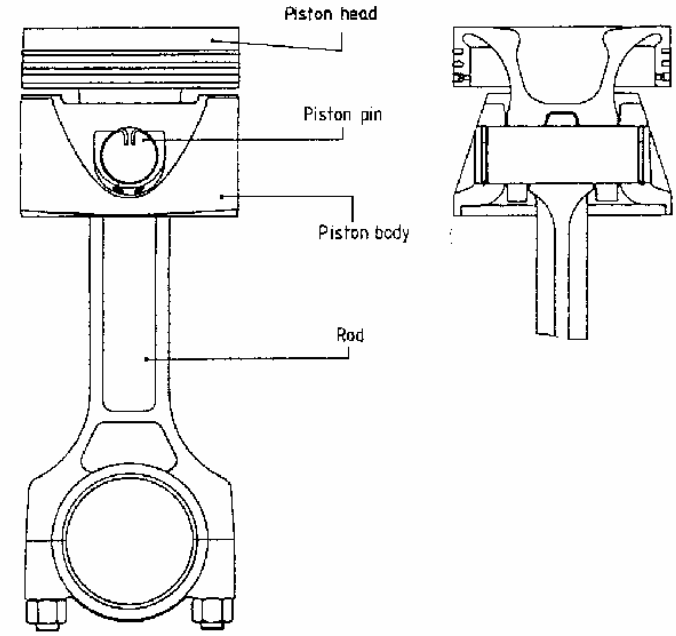
THE ELSBETT ARTICULATED PISTON

The **ELSBETT** piston comprises two interconnected parts:

- the piston head, made from nodular cast iron, and
- the piston body, made from aluminium, which are connected between themselves and to the piston rod by the piston pin.

The piston head houses the rings, and its functions are to seal and compress, and to receive the vertical forces caused by the expansion of the gases. The piston head is made from nodular cast iron, which undergoes minimal thermal expansion and has low heat-conductive properties. Its thermal expansion is identical to that of the material used to construct the block and, therefore, it affords an excellent seal. The surface of the combustion chamber wall is of a reduced size so as to minimise the heat flow and, consequently, prevent the unnecessary overheating of the material.



The piston body provides lateral support (normal forces), and aids the cooling of the internal walls of the cylinder through the distribution of lubricating oil. For this reason it is equipped with guide vanes and is made from aluminium. The static and thermal optimisation of the **ELSBETT** articulated piston enables it to be lighter than its aluminium counterpart.

