

## Case Study

### Plug Connector housing in Pocan<sup>®</sup> B 7616- virtually isotropic behavior ...



Fig. Plug connector

... was one of the properties specified for the materials to be used on plug connectors so as to guarantee the dimensional stability of their increasingly delicate contact cavities. For this reason the plug connector housing on the Fiat Body Computer, which forms part of the central electronics system and supports the key function of the electric immobilizer, was made of Pocan<sup>®</sup> B 7616.

Molex chose this PBT blend in preference to a 15 % glass fiber filled standard PBT grade, since it is ideally suited to the application with its virtually isotropic

**OEM:** Fiat  
**Material:** Pocan<sup>®</sup> B 7616  
**Producer:** Molex  
**Industry:** Electrical/Electronics

shrinkage behavior and high dimensional stability. The design engineers at Molex found a particularly ingenious solution to the problems associated with the dissimilar thermal expansion of the interlinked plug connector housings and the circuit board.

They simply designed the bars linking the plug connector housings in the form of spring elements that compensate for the different expansion of the parts during the soldering operation.

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