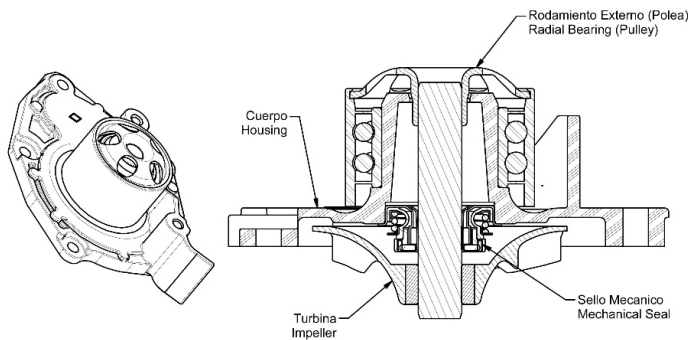


## Technical Information Sheet

### R232 / R234 water pump

Within the series of water pumps that apply to Renault F9Q engines, we have developed two new references with the outer bearing mode. The fitting of the bearing on the outside of the pump body allows the outer surface to be used directly as a water pump pulley, so the static and dynamic loads on the pulley are directly exerted on the bearing, largely eliminating the irregular loads.



Regarding this two references, (R232 and R234), we have replaced the previous 30mm bearings with 52mm bearings, increasing from 6 to 11 balls in each of the two rows, with the static and dynamic load capacities of the pump bearing will be increased more than 2.5 times. This reduces the possibility of bearing failure from excessive belt tension.



R234 with 52mm outer bearing replaces our R229 in all its applications, which will continue in production. Maintaining the 30mm inner bearing structure, both water pumps have a 10-blade 70mm impeller.

OE has released a third version: reference R232, which also mounts the 52mm outer bearing, but has a new 20-blade 72.7mm turbine. The impeller is the only that differs from R234. This reference can be mounted in some applications of the R229, but neither OE clarifies it completely.



R232 20 blades  
Ø:72.7mm



R234 10 blades  
Ø:72.7mm

NOTE: According to the official Renault sheet, the assembly of these references requires specific tools to measure and regulate the belt tension, which are not common in workshops. Incorrect timing belt adjustment could cause premature failure of the water pump (loose pulley, water pump blockage, bearing displacement...) and will invalidate the product warranty.