

Bearing & ABS Sensor Solutions

The Challenge:

A Power Sports customer approached Koyo with the request to incorporate an ABS sensing system into the bearing design. At the time their sensor and associated parts were separate components outside of the wheel hub causing sensor contamination and poor visual appearance. The challenge was to integrate the sensor system into the wheel hub.



Analysis:

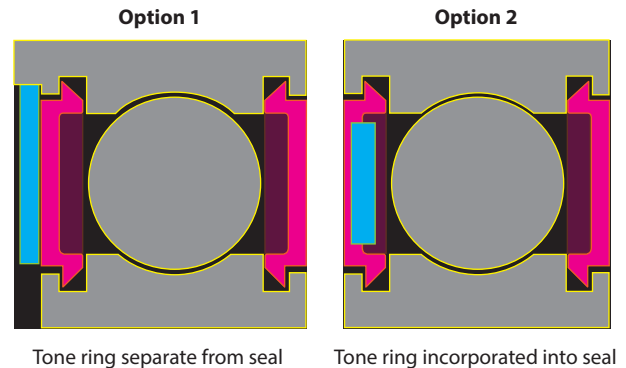
Of the two types of sensors generally used to control ABS, Koyo and the customer preferred the Hall Effects Sensor type and wanted to incorporate the tone ring that triggers the sensor into the bearing design.



Koyo's Solution:

It was determined that Koyo had two design options with modified Koyo brand 6205 and 6304 deep groove ball bearings.

After pursuing and thoroughly evaluating both options with the sensor supplier, Koyo engineers recommended the tone ring incorporated into the seal design (option 2) as it more completely addressed the customer's challenge.



Result:

In collaboration with the sensor supplier and the customer, Koyo's recommended design was implemented and the customer feedback has been excellent.



Solutions For Demanding Applications