



Tru-Loc® Series

BACKGROUND

Amphenol Industrial Operations has developed a specialized connection system family that integrates 1.5 mm socket contacts with the company's proprietary RADSOK® contact technology. This technology underpins the Tru-Loc® connector series, which is tailored for high-performance reliability in challenging environments. Designed for applications such as diesel engine valve covers and high-vibration sensor placements, the Tru-Loc® series addresses the need for durable, stable connections in demanding conditions.

PROBLEM

In high-temperature and high-vibration environments with exposure to oil, reliable electrical connections are essential. With the shift towards oil-cooled motor systems, automotive applications demand connectors and seals that can withstand continuous exposure to oil without degradation. The connectors must provide robust sealing to prevent any oil leakage, while also ensuring there is no material breakdown or corrosion that could compromise performance over time. Maintaining connector integrity in such challenging conditions is critical to supporting the durability and reliability of oil-cooled automotive systems.

AIO SOLUTION

The Tru-Loc® Series offers an economical solution for connection needs in automotive and heavy equipment applications, designed to meet the rigorous demands of these environments. The series features multiple insert arrangements, available in 2, 4, 6, and 12-pin configurations, providing flexibility for various applications. It operates within a temperature range of -40°C to either 125°C or 150°C, depending on specific requirements, and maintains a dielectric withstand voltage (DWV) of 1600V. The connectors support an operating current of up to 13A and are engineered to endure high-vibration conditions, withstanding forces up to 32g. Designed to be oil-resistant, the Tru-Loc® Series ensures reliability even in oil-exposed environments and includes a Connector Position Assurance (CPA) feature to enhance security and alignment during connection.

