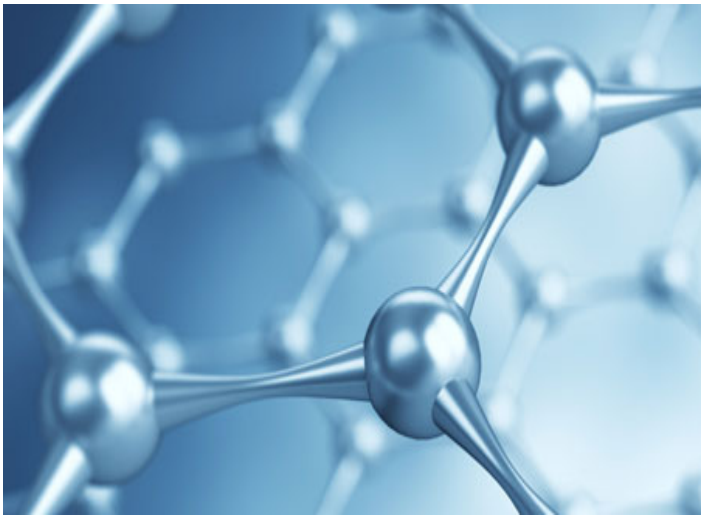
Unrivaled Protection with Vapor-Deposited Parylene

Cutting Edge Sensor Shielding



Parylene coating, a cutting-edge technology utilized by Amphenol All Sensors, significantly enhances the durability and reliability of pressure sensors, making it a pivotal advancement in sensor technology.

This vapor-deposited polymer forms a uniform, pinhole-free layer that can be precisely controlled to achieve thicknesses ranging from a few nanometers to several micrometers, depending on the application's requirements. The primary benefit of Parylene coating lies in its exceptional ability to provide comprehensive protection against a wide array of environmental stressors, including moisture, chemicals, dust, and other contaminants that could compromise the sensor's performance and longevity.

Moreover, Parylene's unique molecular structure grants it excellent dielectric properties, contributing to the sensor's improved electrical insulation. This is particularly beneficial in applications where sensors are exposed to high humidity or harsh environments, ensuring consistent and reliable measurements. Additionally, Parylene coating is biocompatible, making it suitable for use in medical devices and other applications where direct contact with the human body is required.

The coating's thin, lightweight nature does not significantly alter the size or weight of the pressure sensor, preserving its compactness and suitability for a wide range of applications. By providing a protective barrier without compromising the sensor's form factor or functionality, Parylene coating substantially extends the operational lifespan of pressure sensors, offering a cost-effective solution to maintaining high performance and reliability in challenging environments.