

Xylan PTFE Membrane Coating for Pressure Gauge long term Protection

Schmierer Germany has introduced a specialized Graphene infused PTFE Xylan 1427 coating for diaphragm gauge membranes as a standard for standard pressure ranges. This coating provides continuous long-term protection against corrosion and chemicals for the Mineral Oil and Chemical Sector. Xylan 1427 series fastener-class coatings are waterborne/VOC-compliant, resin-bonded, thermally cured, single-film, dry-film lubricants. They are primarily formulated for use on fasteners and oil tools to prevent corrosion and resist chemicals.



Advantages:

- Improved service life of pressure gauges due to improved corrosion resistance compared to the standard 316L version
- Graphene infused for great corrosion resistance and low friction
- Higher accuracy of pressure gauges due to better stability of the coating in contrast with 316L Foil
- Reduced delivery times and cost efficient pricing through shortened production times
- Xylan 142X series can be used continuously from -60°F (-50°C) to +350°F (+175°C) and can survive up to +400°F (+204°C) intermittently.
- 2 layers of 1427 (0.6 – 1.0 mil) are used on our diaphragms as tight coating protecting your workers and ensuring process safety for long periods of time



Pressure Range:

0-6 bar, 0-10 Bar, 0-16 Bar, 0-25 bar

Vacuum Ranges also from -1-0-5 Bar to -1-0-24 bar

Working Principle of Diaphragm PG:



A thin corrugated membrane is built-in between the two flanges of the diaphragm pressure gauges.

If there is pressure applied on one side of the membrane it will deflect itself against the direction of the incoming pressure. This deflection of the diaphragm is a measure for the incoming pressure and is carried over to a gear segment onto the gear of the movement.

This technology provides a much higher overload safety (up to 40 bar) than standard Bourdon Tube gauges.