Nexus Seals

Working With People to Engineer Solutions

# Style 4109

## Pump & Valve Packing

**Description**

Style 4109 tape is made by firstly braiding an Inconel Wire sleeve around each yarn of pure Expanded Graphite Yarn. This is then braided into a rectangular packing with a very high pressure capability. The benefit of an Expanded Graphite gasket is enhanced by the use of a Glass Fibre leader to ensure high temperature compatibility without volume loss. This product has the characteristic heat dissipation qualities, good sealing ability, high chemical resistance and high compressibility properties of Expanded Graphite as well as the added pressure capability due to the inclusion of Inconel wire around each strand of Graphite.

**Construction**

Style 4109 is made from a braided packing construction of Expanded Graphite fibre tape with an Inconel wire sleeve reinforcement to withstand the most arduous conditions. The product is formed into a rectangular shape and an adhesive tape is applied to assist with installation.

**Application**

This product is suited for flange gaskets of any size. It is a substitute for most pre-cut gaskets and cut to size gaskets. It soon becomes an essential part of every artisan's toolbox. Simply clean the flange, remove the adhesive paper backing and apply the product to the flange sealing surface.

**Specification**

| Item | UoM | Magnitude | |
|---|---|---|---|
| Tolerance of density | g/cm3 | ≤ ± 0.05 | |
| Tolerance of thickness | mm | ≤ ± 0.03 | |
| Carbon content | % | 98 ~ 99.9 | |
| Tensile strength | MPa | ≥ 3.5 | |
| Compressibility | % | 25 ~ 30 | |
| Resilient Rate | % | > 15 | |
| Sulphur content | ppm | < 1000 | |
| Chlorine content | ppm | < 50 | |
| Total Fluorine Content | ppm | < 20 | |
| Ignition Loss | % | < 10 (300°C @ 3 hours) | |
| Volumetric Density | g/cm3 | 1.0 ~ 1.3 | |
| Working Temperature | °C | Oxidising | -200 ~ +450 |
| | | Non-oxidising | -200 ~ +650 |
| Pressure | bar | 140 | |
| Dimensional Deviation | mm | Axial | 0.00 ~ +0.50 |
| | | Radial | 0.00 ~ -0.50 |
| Ash Content in Graphite | % | < 1.5 | |
| pH | pH | 0 - 14 | |