

GRAPH-LOCK® PRODUCTS

An extremely pure graphite packing, Garlock GRAPH-LOCK products offer unmatched service in industrial environments where searing temperatures and crushing pressures cause constant failure of conventional packings.

It's self-lubricating, dimensionally stable, impervious to gases and fluids, and corrosion resistant. GRAPH-LOCK products offer excellent sealing capabilities under extreme conditions for longer equipment life and less maintenance. It's available in tape and die-formed rings from Garlock Compression Packing, and in sheet form from Garlock Sheet Products.

Garlock Compression Packing offers two purity levels of our GRAPH-LOCK products—commercial grade of 98% and nuclear grade of 99.5%. The nuclear grade material typically meets General Electric Spec. D50YP12, Rev. 2, dated Oct. 1992; MIL-P-24503B (SH); and can be certified for oxygen service.

GRAPH-LOCK DIAMOND TEXTURIZED TAPE

This diamond-texturized tape is an advanced and adaptable valve packing. Maintenance, tools, and downtime are cut considerably when installation or servicing is required. The tape is wound onto the stem and then compressed to half its width, repeated until the stuffing box is filled. Using this system, a small tape inventory can pack any size valve with superior sealing service.

TEMPERATURE: -328°F to +850°F (-200°C to +455°C) in oxidizing media
+5432°F (+3000°C) continuous in reducing or inert media
+1200°F (+650°C) in steam

PH RANGE: 0 - 14 (Except strong oxidizers)

CONSTRUCTION: Diamond-Texturized Tape, With or Without Pressure-Sensitive Adhesive, Smooth Finish, and Corrugated Tape

DENSITIES: .015" thickness - 70#/ft³ +/-3.5
.020" thickness - 44#/ft³ +/-2.2

GRAPH-LOCK® DIE-FORMED RINGS

Style #470 – Standard Density Rings (71 lb/ft³) – Solid or Split

Style #490 – Premium Density Rings (87 lb/ft³) - Solid or Split

Style #4100 – Ultra Premium Density Rings (100 lb/ft³) - Solid or Split

An exact amount of GRAPH-LOCK diamond-texturized tape is placed into precision molds and then compressed by custom Garlock equipment to form GRAPH-LOCK rings. The result - quality, smooth-finished, close-tolerance die-formed rings. Any custom size can be produced. Every ring offers uniform axial/radial thermal conductivity and tight, sure sealing service.

GRAPH-LOCK die-formed rings are produced using pure graphite GRAPH-LOCK tape.

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+5432°F (+3000°C) continuous in reducing or inert media

+1200°F (+650°C) in steam

PH RANGE

0 - 14 (Except strong oxidizers)

CONSTRUCTION

Die-Formed Rings produced from GRAPH-LOCK

Diamond-Texturized Tape

Certifiable to as low as 50 ppm Leachable Chlorides

Our nuclear grade material can be certified to MIL-P-24503B (SH); General Electric Spec D50YP12, Rev. 2, dated Oct. 1992; and can be certified for oxygen service.

FOR SURE SEALING... Always use Garlock braided end-rings with GRAPH-LOCK die-formed rings. Typical sets include GRAPH-LOCK center rings with Garlock Styles 98, GARFITE®

200, GARFITE 100, 1298, 1200-PBI* or 127-AFP end-rings. Specify G-700 for nuclear service.

The GRAPH-LOCK center rings polish and enhance the stem for extended service, while the end-rings prevent extrusion and act as wipers to prevent graphite particle transfer. A must when more than .015" separates stem and stuffing box bottom, in worn stuffing boxes, and in high-pressure service.

*PBI – Polybenzimidazole - Trademark of Celanese Fibers Operations