Graphite Packings

Style 1306

» Style 1306 is braided from high purity flexible graphite yarns with carbon filament yarns on the corners.

» The combination of materials and construction gives Style 1306 added abrasion resistance over standard flexible graphite yarn packings.

SPECIFICATIONS

Construction	LATTICE BRAID® graphite filament
Temperature	-328°F (-200°C) to 850°F (455°C) atmosphere to 1000°F (538°C) in steam
pH range	0-14 (except strong oxidizers)
Pressure	to 500 psi (34 bar) rotary
Shaft speed	to 4,000 fpm (20 m/s) rotary

STYLE 1300-E

» Our entry level graphite packing, 1300-E handles high temperature rotary and valve service

SPECIFICATIONS

Construction	LATTICE BRAID® flexible graphite
Temperature	-328°F (-200°C) to 850°F (455°C) atmosphere to 1200°F (650°C) in steam
pH range	0-14 (except strong oxidizers)
Pressure	to 500 psi (34 bar) rotary to 3,000 psi (200 bar) valves
Shaft speed	to 4,000 fpm (20 m/s) rotary

STYLE 1333-G

Premium flexible Graphite (FG) packing with field proven performance and reliability. The packing material is reinforced with high purity graphite fiber yarn giving it superiority over lower performing reinforcement materials.

» Style 1333-G is braided from graphite fiber reinforced flexible graphite yarns and high purity graphite filament yarns to provide high tensile strength and low friction

» The excellent heat dissipating properties of 1333-G allows our customers to conserve both water and energy

» Since Style 1333-G can be used in clean, high speed, high temperature applications requiring low leakage rates, our customers also realize a significant savings in inventory investment by using this material in both pumps and valves

SPECIFICATIONS

Construction	Offset square flexible graphite braid reinforced with a graphite dispersion
Temperature	-328°F (-200°C) to 850°F (455°C) atmosphere to 1200°F (650°C) in steam
pH range	0-14 (except strong oxidizers)
Pressure	to 600 psi (41 bar) rotary to 4,000 psi (275 bar) valves
Shaft speed	to 4,800 fpm (23 m/s) rotary

* Style 1333-G Square is available upon request

For technical assistance, call 1-877-GARLOCK or email questions to: gst.packingapps@garlock.com

Garlock
an EnPro Industries family of companies

Expanded PTFE and Graphite Fiber

STYLE 5100 GFO® PACKING

- Braided compression packing made from 100% GFO® fiber provides consistently high performance in a wide range of applications
- Unlike other PTFE/graphite packing, only those made with GFO® fiber, with its 20+ year history of trouble-free performance, deliver an unmatched level of assurance, confidence and easy handling
- As a proud Seal of Assurance member, Garlock produces Style 5100 to the exacting standards that allow an operation to benefit from reduced maintenance and inventory costs
- Style 5100 is non-contaminating so it will not contaminate the end product
- Remember, if it does not say 100% GFO® on the packing, then it is not genuine GFO®

SPECIFICATIONS

Construction	GFO® with Silicone lubrication
Temperature	-200°F (-130°C) to 550°F (288°C)
pH range	0-14**
Pressure	to 300 psi (20 bar) rotary/centrifugal to 2,000 psi (138 bar) valves
Shaft speed	to 4,800 fpm

STYLE G-200

- Style G-200 offers low friction for energy savings
- Excellent sealability against abrasives for improved reliability, temperature and chemical resistance for longer packing life
- G-200 is a good choice for high speed rotary service

SPECIFICATIONS

Construction	LATTICE BRAID® graphite filament lubricated with graphite dispersion
Temperature	-328°F (-200°C) to 850°F (455°C) atmosphere to 1200°F (650°C) in steam
pH range	0-14 (except strong oxidizers)
Pressure	to 500 psi (34 bar) rotary
Shaft speed	to 4,000 fpm (20 m/s)

** Not recommended for Chlorine service GFO is a registered trademark of WL Gore.

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Packing Materials

ARAMID

These fibers are aromatic polyamides that were given the generic name "aramid." With excellent resistance to high temperatures and exceptional tensile strength, aramid filaments are considered to be stronger, pound for pound, than steel. Garlock utilizes a variety of these fibers including spun and filament versions. Filament yarns are added to the corners of pump packings for greater resistance to abrasive media.

CARBON/GRAPHITE FILAMENT PACKINGS

Garlock carbon fiber products are made from carbon yarns having a 95% minimum carbon assay. Premium products (Styles 98, 98-VC and 5000) use exclusive staple fiber yarn, that allows the packing to conform to shape and fit better, compared to continuous carbon fiber packing. This advantage improves sealing while maintaining low friction coefficients resulting in less shaft wear, greater packing longevity and lower maintenance cost. Garlock carbon fiber packing offer more value per weight than other common carbon packing.

Garlock graphite filament products are braided from high-purity graphite filaments with a minimum carbon assay of 99%. They have excellent chemical resistance, are thermally conductive and can be used in extreme temperature and pressure conditions.

FIBERGLASS

Glass fibers exhibit superior thermal properties, dimensional stability and tensile strength. Glass fibers will not burn, and they dissipate heat more rapidly than organic fibers. The glass fibers most commonly used in compression packings are "E" grade (electrical) and "S" grade (strength). Common solvents, oils, petroleum distillates, bleaches and most organic chemicals do not affect fiberglass.

FLAX

Garlock carefully selects quality long-fiber roving yarns, braids them, and then thoroughly impregnates them with the required lubricating agents. They are designed for optimum service in waste and dilute aqueous solutions up to +250°F (+121°C) at low to medium pressures. Industries such as mining, milling, steel, waste/water treatment, marine, and pulp and paper regularly specify these packings for their operations.

GRAPH-LOCK® PRODUCTS

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

FLEXIBLE GRAPHITE TAPE PRODUCTS

GRAPH-LOCK® is 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 is 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 95% and nuclear grade of 99.5%. The nuclear grade material meets General Electric Spec. D50YP12, Rev. 2 dated Oct. 1992; MIL-P-24503B (SH); and can be certified for oxygen service.

FLEXIBLE GRAPHITE BRAIDED PRODUCTS

Garlock offers a variety of high-purity braided flexible GRAPH-LOCK® products as well. We offer a plain braided graphite version (1300-E), INCONEL** wire-reinforced versions (1303-FEP, 1398, 1399) and a graphite filament-reinforced version (1333-G).

MILL-RIGHT® PRODUCTS

The experience gained over 100 years as a manufacturer has enabled Garlock to develop "Tough Technology" for the MILL-RIGHT® family of packings. Fiber-infused technology starts with yarns produced at our own facility. With the addition of an exclusive blocking and lubricating system, Garlock non-contaminating packings can resist abrasion without being abrasive to equipment and perform successfully throughout a broad range of industries and applications.

* P.A.N.: poly-acrylo-nitrile

** INCONEL is a registered trademark of Inco Alloys International, Inc.