



# Klinger 3222

The cost-effective, high performance valve & pump packing. Offering excellent sealing and operational reliability for both Original Equipment Manufacturers and plant users alike.

Klinger 3222 is one of the Klinger TopLine range of compression packings.

This is an optimised range introduced to provide users with gland sealing products that meet todays demanding services, offering effective and trouble-free sealing during application. To achieve this we have selected the best materials and the best production methods. The result is the Klinger TopLine range.

Ongoing test and development in line with the Klinger philosophy will ensure the continued improvement of the TopLine products.



BS EN 9100:2003, ISO 9001:2008 Certificate no: FM 10571 • K3222 is manufactured using expanded graphite ribbons, to produce a compression packing of square cross-section that is fully flexible so that minimal gland pressure is required to effect a seal.

• Fitting is by traditional methods from the roll, since no special tools or forming dies are required Klinger 3222 offers the user a very effective alternative to specialised die-formed graphite rings.

• It is BAM approved for use in oxygen service

 The packing has excellent thermal conductivity and resilience and is therefore unaffected by the effects of cycling temperature or pressure.

 Graphite is very resistant to chemical attack by a variety of media such as acids, alkaline solutions, oils, greases and steam. K3222 can be confidently used in environmentally sensitive applications.

This is self-lubricating packing with superior gliding properties. Its soft, conformable nature ensures that there is no abrasion of moving parts and that graphite pick-up on stems and shafts is minimised

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## TopLine Packing 3222

#### Service Capabilities

When used in equipment in good mechanical condition and installed using our product guidelines the undernoted values apply:

- Minimum operating Temperature -200°C
- Maximum operating temperature 430°C
- Maximum steam temperature 650°C
- pH 0-14
- Maximum static pressure 280 bar

K3222 can also be used in pumping applications, please contact Klinger for further advice.

**Note:** The packing should not be subjected to the maximums of temperature, pressure and speed simultaneously, for further advice please contact our technical department.

#### Forms of Supply

Klinger packings are offered in a range of standardised packages:

Size: 3mm to 25mm

Length: 8 metres per box

by weight:

#### sizes under 9.5mm 1kg/box 9.5mm to 12.5mm 2kg/box sizes over 12.5mm 4kg/box

Alternative lengths and weights can be offered upon request, please contact Klinger for further details.

### Klinger 3222 is suitable for use as a general valve and pump packing within many industries, for example;

- Chemical Plant & Chemical Processing
- Gas Plant
- Petrochemical Plants
- Power Stations
- Refineries
- Steel Mills

#### **Technical Advice**

If you require additional technical information or would like Klinger to advise you on a particular application, then contact our Technical Department at the address shown. It is advantageous to provide the following details:

- 1. Type of valve or pump
- 2. Working and test pressure
- 3. Temperature steady or cycling
- 4. Rate of pressure & temperature increase
  - 5. Medium and concentration
- 6. Operating speed
- 7. Special requirements
- 8. Details of stuffing box design