



# Klinger 3222W

High performance valve pump packing for high pressure, high temperature applications. Offering excellent sealing and operational reliability for both Original Equipment Manufacturers and plant users alike.

Klinger 3222W 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 today's 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.

- The inclusion of Inconel wire reinforcement ensures that K3222W has excellent dimensional stability and will operate under high stress conditions.
- Graphite is very resistant to chemical attack by a variety of media such as acids, alkaline solutions, oils, greases and steam. This Klinger style also has unlimited storage life and will not cause any damage to either health or the environment.
- The packing has excellent thermal conductivity and thermal resistance. K3222W is therefore unaffected by fluctuations during application such as thermal cycling.

- K3222W is manufactured using expanded graphite ribbons each incorporating a fine inconel wire, to produce a compression packing of square cross-section with added mechanical strength. It is fully flexible so that minimal gland pressure is required to effect a seal.
- There is no need for special die-formed ring sets, K3222W can be fitted using traditional methods from roll, as and when required. This reduces the need for special tooling and stocking of different pre-formed rings.



Certificate No FM. 10571

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## **TopLine Packing 3222W**

#### 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 300 bar

**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 3222W has been specially designed for use in all high temperature & pressure seals as found in:

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

K3222W is also recommended for cryogenic applications and those services which require low emission levels.

### **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