



# Klinger 4333

**A universal packing, using lubricated polyimide filaments to produce a TopLine grade able to perform reliably in a wide range of services and equipment.**

*Klinger 4333 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 base yarn of Klinger 4333 is composed of synthetic polyimide filaments which have excellent mechanical properties in terms of overall strength and elongation.

■ It is manufactured by the Klingerlock braiding process, during which we add an additional PTFE based lubricant. This enhances the packings performance in dynamic applications.

■ The polyimide base structure of K4333 ensures the packing has excellent temperature resistance. Normally low gland loads will achieve a satisfactory seal.

■ K4333 has a wide tolerance to chemical media (pH 0-13) and is particularly suited to acid applications where control of leakage is of importance and PTFE types lack the required mechanical strength to effect an efficient seal.

■ Where shaft wear is a problem, K4333 can be employed as a good alternative to aramid based packings. In practice it significantly reduces wear rates when compared to many other packing types.





# TopLine Packing 4333

## Service Capabilities

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

- Minimum operating Temperature      -80<sup>o</sup> C
- Maximum operating temperature      260<sup>o</sup> C
- Maximum steam temperature      260<sup>o</sup> C
- pH      0-13
- Maximum static pressure      200 bar
- Maximum rotary pressure      50 bar
- Maximum running speed      15 m/s



**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 4333 is suitable for use as a general valve and pump packing within many industries, for example:**

- Petrochemical Plants
- Chemical Processing
- Power Stations
- Pulp & Paper Mills
- Refineries
- Quarries & Mines

## 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

