



# Klinger 4311

TopLine hybrid packing that combines the properties of Aramid and PTFE resulting in an excellent dynamic packing for rotary and reciprocating duties.

K4311 is only one of the Klinger TopLine range of compression packings.

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

Ongoing Test & Development in line with Klinger philosophy will ensure the continued improvement of the TopLine products.

- Klinger 4311 is manufactured from a combination of aramid and PTFE yarns using the Klingerlock braiding technique. The result is a packing with high resistance to extrusion that will operate at high peripheral speeds.
- The PTFE element, which is K4311's running surface, is soft and forgiving. Shaft wear is therefore kept to a minimum. It is a self-lubricating packing and has the ability to operate at temperatures up to +260°C
- The strong aramid corner posts resist extrusion from the stuffing box while ensuring that unwanted particles are excluded. This reduces the detrimental effects of abrasive and viscous media.
- Both constituents of Klinger 4311 enable this TopLine packing to resist attack from a wide range of media, including chemicals.







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# **TopLine Packing 4311**

#### Service Capabilities

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

Minimum operating Temperature -100°C

Maximum operating temperature 280°C

Maximum steam temperature 280°C

■ pH **2-12** 

Maximum static pressure

250 bar

Maximum rotary pressure
 30 bar

Maximum recip pressure
 150 bar

Maximum running speed 6 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 4311 is suitable for use as a general valve and pump packing within many industries, for example;

- Pulp & Paper Mills
- Mines & Quarries
- Petrochemical Plants
- Power Stations
- Refineries
- Steel Mills
- Sewage Works

### **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