# **BRAIDED PACKINGS**



# Hybrid packings

Bearing in mind specific properties of PTFE as a material with exceptional chemical resistance and low friction coefficient, but soft at the same time, and mechanical strength of aramide fibres, we produced the combination of both advantages using special weaves. Packings with uniformly interwoven aramide and PTFE yarns are designed for rotating movement, and packings in which aramide reinforces the edges, are designed for to-and-fro motion and for fittings.

## **PACKING TYPE 6086 ZEBRA**



#### **Characteristics:**

Packing made of PTFE yarn filled with graphite, and aramide yarn impregnated with PTFE. Thanks to special weave, the aramide fibres evenly reinforce the packing. Thus developed packing is strong, softly fills the stuffing box and evenly works with rotating shaft or protecting sleeve.

#### **Application:**

The packing was developed for users of rotodynamic pumps and other equipment working with water, water solutions of salts, acids and bases, liquid fuels, oils and solvents, and suspensions of solids in such media.

| 1 | рН   | Max. temp.  | Rotodynamic pumps        | Piston pumps       | Fittings                   | Dimension range |
|---|------|-------------|--------------------------|--------------------|----------------------------|-----------------|
|   | 2-13 | -200÷+280°C | p = 20 bar<br>v = 20 m/s | not<br>recommended | p = 300  bar<br>v = 2  m/s | 6-25 mm         |

# PACKING TYPE 6087 GAMFLON AR



# **Characteristics:**

The packing makes good use of excellent properties of PTFE yarns filled with graphite and with silicon oil, adding generally known mechanical strength of aramide. Special weave of packing GAMFLON AR, which allows reinforcement of edges with aramide, does not reduce movement properties of PTFE.

#### **Application:**

The packing was developed for users of pumps and fittings encountering problems with highly abrasive media. The packing is also perfect for piston pumps, where to-and-fro motion damages classical packings. Chemical resistance of GAMFLON AR permits the use of this packing with water, oils, liquid fuels, solvents, and medium strong acids and bases.

| 1 | рН   | Max. temp.   | Rotodynamic pumps  | Piston<br>pumps            | Fittings                   | Dimension range |
|---|------|--------------|--------------------|----------------------------|----------------------------|-----------------|
|   | 2-13 | -200÷+280 °C | not<br>recommended | p = 200  bar<br>v = 5  m/s | p = 300  bar<br>v = 2  m/s | 6-25 mm         |

All information in this catalogue is based on years of experience in manufacture and use of the discussed products.

Since sealing performance in the joint is subject to multiple factors such as mounting method, system parameters, and sealed medium, technical parameters specified herein are of informative nature only and cannot be used as grounds for any claims; any special uses of products are subject to consulting with the manufacturer.



#### **PACKING TYPE 6089**

## **Characteristics:**

Packing design is similar to packing type 6087, the only difference being the type of used Teflon yarn, without incorporated graphite.

# **Application:**

The packing was developed for users of pumps and fittings encountering difficulties with highly abrasive media. The packing is also perfect for piston pumps, where to-and-fro motion damages classical packings. Using of white PTFE in the yarn allows its use wherever contamination of sealed medium with graphite is unacceptable.

| рН   | Max. temp.   | Rotodynamic pumps  | Piston<br>pumps            | Fittings                 | Dimension range |
|------|--------------|--------------------|----------------------------|--------------------------|-----------------|
| 2-13 | -200÷+280 °C | not<br>recommended | p = 200  bar<br>v = 5  m/s | p = 300 bar<br>v = 2 m/s | 6-25 mm         |

# Other packings, including cotton type

Recent years have seen the advent of many modern materials and yarns. This does not mean, however, that classic materials are forgotten. For example cotton-based packings are still widely used.

#### **PACKING TYPE 611**



## **Characteristics:**

Packing braided of cotton yarn with microfibrous structure, impregnated with composition of high quality lubricants enriched with high graphite content. The applied weave guarantees high softness and elasticity of packing. Lubricant used to soak the packing reduces friction and removes heat from the friction area.

#### Application:

Recommended for use in fittings and high-speed rotodynamic pumps working with water, steam, oils, solutions of salts and medium strength acids and bases.

| 1 | рН  | Max. temp. | Rotodynamic pumps       | Piston<br>pumps           | Fittings                  | Dimension range |
|---|-----|------------|-------------------------|---------------------------|---------------------------|-----------------|
|   | 5-9 | -30÷+120°C | p = 10 bar<br>v = 5 m/s | p = 20 bar<br>v = 1,5 m/s | p = 60  bar<br>v = 2  m/s | 8-50 mm         |

# **BRAIDED PACKINGS**



#### **PACKING TYPE 621**



## **Characteristics:**

Similarly to packing type 611, it is braided of natural cotton yarn impregnated with composition of lubricants in which graphite was substituted with talc. Thus developed packing can be used wherever even minimum contamination with graphite is unacceptable.

#### **Application:**

Recommended for use in stuffing boxes of pumps and fittings in drinking water installations, in laundries, dyeing plants, in textile and chemical industry.

| рН  | Max. temp. | Rotodynamic pumps       | Piston<br>pumps           | Fittings                  | Dimension range |
|-----|------------|-------------------------|---------------------------|---------------------------|-----------------|
| 5-9 | 120 °C     | p = 10 bar<br>v = 5 m/s | p = 20 bar<br>v = 1,5 m/s | p = 60  bar<br>v = 2  m/s | 8-50 mm         |

#### **PACKING TYPE 641**



# **Characteristics:**

Packing braided of natural cotton saturated with special PTFE-based impregnate, thread by thread, during braiding process. The impregnate has a double function: it reduces friction coefficient while increasing chemical resistance of the packing. At the same time delicate cotton fibres make the resulting packing exceptionally soft and fitting well in the stuffing box.

## **Application:**

General purpose packing. Recommended for use in stuffing boxes of pumps and fittings, in all sectors of industry, and in municipal economy. Resistant to water, oils, liquid fuels, lubricants and solvents, as well as to water solutions of salts and medium strength acids and bases.

| рН  | Max. temp. | Rotodynamic pumps        | Piston<br>pumps           | Fittings                 | Dimension range |
|-----|------------|--------------------------|---------------------------|--------------------------|-----------------|
| 5-9 | -50÷120°C  | p = 10 bar<br>v = 10 m/s | p = 60  bar<br>v = 2  m/s | p = 150 bar<br>v = 2 m/s | 6-25 mm         |

We also manufacture braided packings from ceramic yarn, applied in sealings of fittings, of the following types:

- 616 a packing made of bolus alba yarn, impregnated with a lubricant composition enriched with significant quantity of graphite
- 646 a packing made of bolus alba yarn, soaked with a PTFE-based impregnate