

PACKING OVERVIEW, CLEARANCES AND TOLERANCES

| Type | Mechanical Properties | | | | | Drinking water, foodstuffs | Water, Sewage, Boiler Feed Water | Gases, Air, Nitrogen | Diluted Acids, inorg./org., Saline Solutions | Concentrated acid | Diluted lyes /alkalies | Concentrated ayes / alkalies | Oils, greases | Heat transfer mediums | Solvents | organic compounds | Adhesives, Bitumen | abrasive mediums | Colors, varnishes | page |
|-------------|-----------------------|---------------------|-------------|-----------------------------|------|----------------------------|----------------------------------|----------------------|--|-------------------|------------------------|------------------------------|---------------|-----------------------|----------|-------------------|--------------------|------------------|-------------------|------|
| | Max. Pressure [bar] | Maximum Speed [m/s] | | Temperature Resistance [°C] | | | | | | | | | | | | | | | | |
| | | rotating | oscillating | from | to | | | | | | | | | | | | | | | |
| K80S | 1500 | 0,2 | 2 | -200 | +550 | ● | ● | ● | ○ | ○ | ○ | ○ | ● | ● | ● | ● | ● | ● | ● | 177 |
| K100 | 500 | 5 | 2 | -200 | +550 | ● | ● | ● | ○ | ○ | ● | ○ | ● | ● | ● | ● | ○ | ● | ● | 181 |
| K80 | 300 | 5 | 2 | -200 | +550 | ● | ● | ● | ● | ○ | ● | ● | ● | ● | ● | ○ | ○ | ● | ● | 176 |
| K68 | 2 | - | - | -200 | +550 | X | X | ○ | X | X | X | X | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 175 |
| K80S TA-HT* | 1500 | 5 | 2 | -200 | +550 | ● | ● | ● | ○ | ○ | ○ | ○ | ● | ● | ● | ● | ○ | ○ | ● | 183 |
| K95 | 300 | 30 | 10 | -200 | +450 | ● | ● | ● | ● | ○ | ● | ● | ● | ● | ● | ○ | ○ | ● | ● | 180 |
| K450G | 20 | - | - | -40 | +450 | X | ○ | ○ | ○ | X | ○ | X | ● | ○ | ● | ● | ○ | ○ | X | 181 |
| K80C | 300 | 5 | 2 | -200 | +280 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ○ | ● | ● | 177 |
| K91 | 200 | 20 | 3 | -200 | +280 | ○ | ● | ● | ● | X | ● | X | ● | ● | ● | ● | ● | ○ | ● | 180 |
| K90 | 200 | 10 | 10 | -200 | +280 | ○ | ● | ● | ○ | X | ○ | X | ● | ● | ● | ● | ● | ● | X | 179 |
| K36 | 200 | 0,5 | 2 | -200 | +280 | ○ | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | X | ● | ● | 174 |
| K75 | 200 | 8 | 6 | -200 | +260 | X | ● | ● | ● | X | ● | X | ● | ● | ● | ● | ● | X | ● | 176 |
| K81 | 100 | 20 | 3 | -100 | +280 | X | ● | ● | ● | X | ● | X | ● | ● | ● | ● | ● | ● | X | 178 |
| K89 | 50 | 15 | 15 | -100 | +280 | ○ | ● | ● | ○ | X | ○ | X | ● | ● | ● | ● | ● | ● | X | 179 |
| K40 | 30 | 20 | 5 | -100 | +280 | ○ | ● | ● | ● | ○ | ● | ○ | ● | ● | ○ | ○ | X | X | X | 174 |
| K83 | 100 | 15 | 2 | -100 | +250 | X | ● | ● | ● | X | ● | X | ● | ● | ● | ● | ● | ● | X | 178 |
| K41 | 60 | 10 | 4 | -20 | +120 | ○ | ● | ● | ○ | X | ○ | X | ● | X | ○ | ○ | X | ○ | X | 175 |

● = applicable, ○ = conditionally applicable, X = not applicable

Temperature at the packing. The temperature of the medium can be higher.

Size of the Gap between Spindle, Gland Packing and Housing

If we designate the outer diameter of the spindle as d_1 and the interior diameter of the gland or of the bottom ring as d_2 , then $t = (d_2 - d_1)/2$ is valid for the median radial gap between the spindle and the spacer or the bottom ring. In the case of an off-center position of the spindle or rod, the gap can double to one side to $2t = d_2 - d_1$.

The table shows reference values for the maximum permitted size of the gap t in reference to the packing material. The influence of the operating pressure to be sealed was taken into account in this respect, as generally the smaller packing widths are inserted for the higher pressures.

Tolerances and the Composition of the Surface Area

For the rod or spindle, the accuracy degree should be h9. The surface area roughness should be $R_z \leq 2,5 \mu\text{m}$ or alternatively $R_a \leq 0,6 \mu\text{m}$.

For the gland, the tolerance accuracy degree D10 was proven. The surface area roughness should be $R_z \leq 6,3 \mu\text{m}$ or alternatively $R_a \leq 2,5 \mu\text{m}$.

* For the packing set K80S TA-HT other tolerances and Oberflächenangaben apply. See page 183.

Permitted radial Gap t in mm between Spindle and Gland or Housing

| Nominal width of packing in mm | Packing | | |
|--------------------------------|----------------------------|------------|--------------|
| | K36 K75 K80C K95C | K80 K95 | K80S K100 |
| 3 | 0,08 | 0,20 | 0,35 |
| 4 | 0,10 | 0,22 | 0,40 |
| 5 | 0,10 | 0,24 | 0,45 |
| 6 | 0,12 | 0,28 | 0,50 |
| 8 | 0,12 | 0,32 | 0,55 |
| 10 | 0,14 | 0,36 | 0,60 |
| 12 | 0,14 | 0,40 | 0,65 |
| 15 | 0,16 | 0,45 | 0,70 |
| 20 | 0,16 | 0,50 | 0,75 |
| 25 | 0,18 | 0,55 | 0,80 |

PACKINGS

RivaLon-Packing K36

PTFE-Multifilament with PTFE Dispersion



- static applications
- for pumps
- for valves

Mechanical Properties

| | | | |
|------------------------|-------|-------------|-------------|
| Maximum Pressure | [bar] | | 200 |
| Maximum Speed | [m/s] | rotating | 0,5 |
| | | oscillating | 2 |
| Temperature Resistance | [°C] | from | -200 |
| | | to | +280 |

Standard Width approx. mm

| | | | | | | | | | | | | | |
|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 15 | 16 | 18 | 20 | 22 | 25 |
| 16 | 29 | 45 | 65 | 115 | 180 | 260 | 353 | 405 | 460 | 583 | 720 | 871 | -- |

Weight per meter in g

Notes:

K36S by application of oxygen (fibers BAM-examined)

K 39 for pumps (with silicon oil impregnation)

Uses

● = applicable ○ = conditionally applicable X = not applicable

| | |
|---|---|
| Drinking water, Foodstuffs | ○ |
| Water, Sewage, Boiler Feed Water | ● |
| Gasses, Air, Nitrogen | ● |
| Diluted acids, inorg./org. saline solutions | ● |
| Concentrated acids | ● |
| Diluted lyes/alkalies | ● |
| Concentrated lyes/alkalies | ● |
| Oils, greases | ● |
| Heat transfer mediums | ● |
| Solvents | ● |
| Organic compounds | ● |
| Adhesives, Bitumen | ● |
| Abrasive mediums | X |
| Colors, Varnishes | ● |

RivaFlex-Packing K 40

PTFE-Fiber with incorporated graphite and silicon oil (100% Gore GFO®)



- static applications
- for pumps
- for valves

Mechanical Properties

| | | | |
|------------------------|-------|-------------|-------------|
| Maximum Pressure | [bar] | | 30 |
| Maximum Speed | [m/s] | rotating | 20 |
| | | oscillating | 5 |
| Temperature Resistance | [°C] | from | -100 |
| | | to | +280 |

Standard Width approx. mm

| | | | | | | | | | | | | | |
|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 4 | 5 | 6 | 8 | 10 | 12 | 14 | 15 | 16 | 18 | 20 | 22 | 24 | 25 |
| 26 | 40 | 58 | 102 | 160 | 230 | 325 | 360 | 410 | 518 | 640 | 774 | 920 | 1000 |

Weight per meter in g

Notes:

K40E PTFE-Fiber with incorporated graphite, without lubricant, for valves (100% Gore G2®)

Uses

● = applicable ○ = conditionally applicable X = not applicable

| | |
|---|---|
| Drinking water, Foodstuffs | ○ |
| Water, Sewage, Boiler Feed Water | ● |
| Gasses, Air, Nitrogen | ● |
| Diluted acids, inorg./org. saline solutions | ● |
| Concentrated acids | ○ |
| Diluted lyes/alkalies | ● |
| Concentrated lyes/alkalies | ○ |
| Oils, greases | ● |
| Heat transfer mediums | ● |
| Solvents | ○ |
| Organic compounds | ○ |
| Adhesives, Bitumen | X |
| Abrasive mediums | X |
| Colors, Varnishes | X |

PACKINGS

RamiVal-Packing K41

Ramie-Fiber with PTFE Dispersion and Silicon Oil Impregnation



Mechanical Properties

| | | | |
|------------------------|-------|-------------|-------------|
| Maximum Pressure | [bar] | | 60 |
| Maximum Speed | [m/s] | rotating | 10 |
| | | oscillating | 4 |
| Temperature Resistance | [°C] | from | -20 |
| | | to | +120 |

Standard Width approx. mm

| | | | | | | | | | | | | | | |
|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 15 | 16 | 18 | 20 | 22 | 24 | 25 |
| 13 | 23 | 36 | 52 | 93 | 145 | 209 | 284 | 326 | 371 | 470 | 580 | 702 | 835 | 906 |

Weight per meter in g

Notes:

K41P with paraffin oil

static applications

✓ for pumps

for valves

Uses

● = applicable ○ = conditionally applicable X = not applicable

| | |
|---|---|
| Drinking water, Foodstuffs | ○ |
| Water, Sewage, Boiler Feed Water | ● |
| Gasses, Air, Nitrogen | ● |
| Diluted acids, inorg./org. saline solutions | ○ |
| Concentrated acids | X |
| Diluted lyes/alkalies | ○ |
| Concentrated lyes/alkalies | X |
| Oils, greases | ● |
| Heat transfer mediums | X |
| Solvents | ○ |
| Organic compounds | ○ |
| Adhesives, Bitumen | X |
| Abrasive mediums | ○ |
| Colors, Varnishes | X |

RivaStat-Packing K68

Calcium Silicate Fibers



Mechanical Properties

| | | | |
|------------------------|-------|-------------|-------------|
| Maximum Pressure | [bar] | | 2 |
| Maximum Speed | [m/s] | rotating | - |
| | | oscillating | - |
| Temperature Resistance | [°C] | from | -200 |
| | | to | +550 |

Standard Width approx. mm

| | | | | | | | | | | | | | | |
|---|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 15 | 16 | 18 | 20 | 22 | 24 | 25 |
| - | 18 | 29 | 41 | 74 | 115 | 166 | 225 | 259 | 295 | 373 | 460 | 557 | 662 | 719 |

Weight per meter in g

Notes:

K68G with special graphite impregnation

K68C with special CKP impregnation.

static applications

✓ for pumps

for valves

Uses

● = applicable ○ = conditionally applicable X = not applicable

| | |
|---|---|
| Drinking water, Foodstuffs | X |
| Water, Sewage, Boiler Feed Water | X |
| Gasses, Air, Nitrogen | ○ |
| Diluted acids, inorg./org. saline solutions | X |
| Concentrated acids | X |
| Diluted lyes/alkalies | X |
| Concentrated lyes/alkalies | X |
| Oils, greases | ○ |
| Heat transfer mediums | ○ |
| Solvents | ○ |
| Organic compounds | ○ |
| Adhesives, Bitumen | ○ |
| Abrasive mediums | ○ |
| Colors, Varnishes | ○ |

RivaNorm-Packing K75

Calcium Silicate Fibers intensively impregnated with PTFE dispersion



- static applications
- for pumps
- for valves

Mechanical Properties

| | | | |
|------------------------|-------|-------------|-------------|
| Maximum Pressure | [bar] | | 200 |
| Maximum Speed | [m/s] | rotating | 8 |
| | | oscillating | 6 |
| Temperature Resistance | [°C] | from | -200 |
| | | to | +260 |

| | | | | | | | | | | | | | | |
|---------------------------|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Standard Width approx. mm | | | | | | | | | | | | | | |
| 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 15 | 16 | 18 | 20 | 22 | 24 | 25 |
| - | 22 | 33 | 49 | 86 | 135 | 195 | 265 | 304 | 346 | 438 | 540 | 653 | 775 | 844 |
| Weight per meter in g | | | | | | | | | | | | | | |

Notes:

K75Ö for pumps (with PTFE dispersion and lubrication)

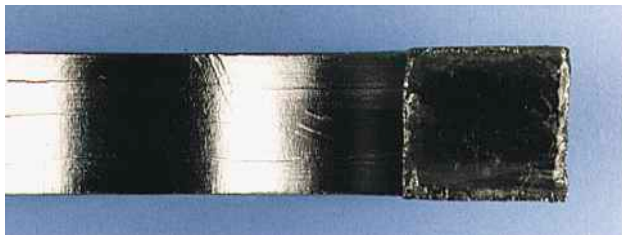
Uses

● = applicable ○ = conditionally applicable X = not applicable

| | |
|---|---|
| Drinking water, Foodstuffs | X |
| Water, Sewage, Boiler Feed Water | ● |
| Gasses, Air, Nitrogen | ● |
| Diluted acids, inorg./org. saline solutions | ● |
| Concentrated acids | X |
| Diluted lyes/alkalies | ● |
| Concentrated lyes/alkalies | X |
| Oils, greases | ● |
| Heat transfer mediums | ● |
| Solvents | ● |
| Organic compounds | ● |
| Adhesives, Bitumen | ● |
| Abrasive mediums | X |
| Colors, Varnishes | ● |

RivaTherm-Packing K 80

Packing ring wound from flexible graphite foil and pressed in moulds



- static applications
- for pumps
- for valves

Mechanical Properties

| | | | |
|------------------------|-------|-------------|-------------|
| Maximum Pressure | [bar] | | 300 |
| Maximum Speed | [m/s] | rotating | 5 |
| | | oscillating | 2 |
| Temperature Resistance | [°C] | from | -200 |
| | | to | +550 |

| | |
|----------------------------|--|
| Dieformed Packing Ring | |
| Seamless, slotted or split | |

Notes:

In connection with K80S, pressure load up to 1500 bar.
With steam up to a maximum of 650 °C.

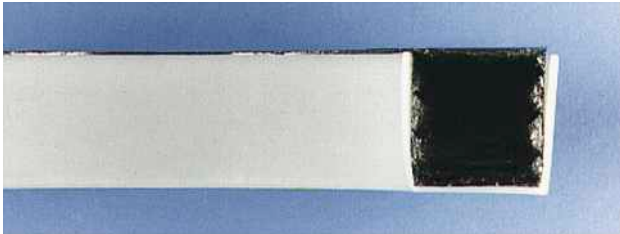
Uses

● = applicable ○ = conditionally applicable X = not applicable

| | |
|---|---|
| Drinking water, Foodstuffs | ● |
| Water, Sewage, Boiler Feed Water | ● |
| Gasses, Air, Nitrogen | ● |
| Diluted acids, inorg./org. saline solutions | ● |
| Concentrated acids | ○ |
| Diluted lyes/alkalies | ● |
| Concentrated lyes/alkalies | ● |
| Oils, greases | ● |
| Heat transfer mediums | ● |
| Solvents | ● |
| Organic compounds | ● |
| Adhesives, Bitumen | ○ |
| Abrasive mediums | ○ |
| Colors, Varnishes | ● |

RivaTherm K 80 C

Graphite foil wound and pressed in moulds, U-formed envelope of sintered PTFE



- static applications
- for pumps
- for valves

Mechanical Properties

| | | | |
|------------------------|-------|-------------|-------------|
| Maximum Pressure | [bar] | | 300 |
| Maximum Speed | [m/s] | rotating | 5 |
| | | oscillating | 2 |
| Temperature Resistance | [°C] | from | -200 |
| | | to | +280 |

Dieformed Packing Ring
Seamless

Notes:

For uses consistent with TA-Luft. When graphite is permissible, we recommend K80S rings as antiextrusion rings

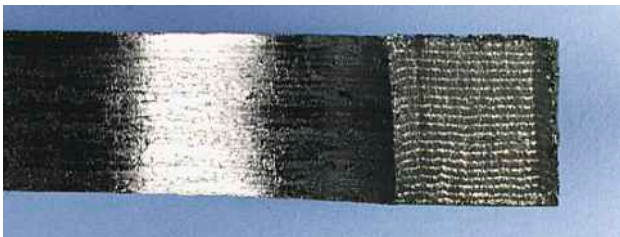
Uses

● = applicable ○ = conditionally applicable X = not applicable

| | |
|---|---|
| Drinking water, Foodstuffs | ● |
| Water, Sewage, Boiler Feed Water | ● |
| Gasses, Air, Nitrogen | ● |
| Diluted acids, inorg./org. saline solutions | ● |
| Concentrated acids | ● |
| Diluted lyes/alkalies | ● |
| Concentrated lyes/alkalies | ● |
| Oils, greases | ● |
| Heat transfer mediums | ● |
| Solvents | ● |
| Organic compounds | ● |
| Adhesives, Bitumen | ● |
| Abrasive mediums | ○ |
| Colors, Varnishes | ● |

RivaTherm K 80 S

RivaTherm-Packing ring Stainless steel, graphite laminate layered and pressed in moulds



- static applications
- for pumps
- for valves

Mechanical Properties

| | | | |
|------------------------|-------|-------------|-------------|
| Maximum Pressure | [bar] | | 1500 |
| Maximum Speed | [m/s] | rotating | 0,2 |
| | | oscillating | 2 |
| Temperature Resistance | [°C] | from | -200 |
| | | to | +550 |

Dieformed Packing Ring
Seamless, slotted or split

Notes:

With steam up to a maximum of 650 °C. Only intended as antiextrusion ring.

Uses

● = applicable ○ = conditionally applicable X = not applicable

| | |
|---|---|
| Drinking water, Foodstuffs | ● |
| Water, Sewage, Boiler Feed Water | ● |
| Gasses, Air, Nitrogen | ● |
| Diluted acids, inorg./org. saline solutions | ○ |
| Concentrated acids | ○ |
| Diluted lyes/alkalies | ○ |
| Concentrated lyes/alkalies | ○ |
| Oils, greases | ● |
| Heat transfer mediums | ● |
| Solvents | ● |
| Organic compounds | ● |
| Adhesives, Bitumen | ● |
| Abrasive mediums | ● |
| Colors, Varnishes | ● |

PACKINGS

RivaMid-Packing K81

Aramide continuous filament (TWARON®) with PTFE dispersion and silicon oil



- static applications
- for pumps
- for valves

Mechanical Properties

| | | | |
|------------------------|-------|-------------|-------------|
| Maximum Pressure | [bar] | | 100 |
| Maximum Speed | [m/s] | rotating | 20 |
| | | oscillating | 3 |
| Temperature Resistance | [°C] | from | -100 |
| | | to | +280 |

Standard Width approx. mm

| | | | | | | | | | | | | | | |
|---|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 15 | 16 | 18 | 20 | 22 | 24 | 25 |
| - | 23 | 36 | 52 | 93 | 145 | 209 | 284 | 326 | 371 | 470 | 580 | 702 | 835 | 906 |

Weight per meter in g

Uses

● = applicable ○ = conditionally applicable X = not applicable

| | |
|---|---|
| Drinking water, Foodstuffs | X |
| Water, Sewage, Boiler Feed Water | ● |
| Gasses, Air, Nitrogen | ● |
| Diluted acids, inorg./org. saline solutions | ● |
| Concentrated acids | X |
| Diluted lyes/alkalies | ● |
| Concentrated lyes/alkalies | X |
| Oils, greases | ● |
| Heat transfer mediums | ● |
| Solvents | ● |
| Organic compounds | ● |
| Adhesives, Bitumen | ● |
| Abrasive mediums | ● |
| Colors, Varnishes | X |

RivaMid-Packing K83

Aramide staple fibers with PTFE dispersion and silicon oil



- static applications
- for pumps
- for valves

Mechanical Properties

| | | | |
|------------------------|-------|-------------|-------------|
| Maximum Pressure | [bar] | | 100 |
| Maximum Speed | [m/s] | rotating | 15 |
| | | oscillating | 2 |
| Temperature Resistance | [°C] | from | -100 |
| | | to | +250 |

Standard Width approx. mm

| | | | | | | | | | | | | | | |
|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 15 | 16 | 18 | 20 | 22 | 24 | 25 |
| 14 | 23 | 36 | 52 | 93 | 145 | 209 | 284 | 326 | 371 | 470 | 580 | 702 | 835 | 906 |

Weight per meter in g

Uses

● = applicable ○ = conditionally applicable X = not applicable

| | |
|---|---|
| Drinking water, Foodstuffs | X |
| Water, Sewage, Boiler Feed Water | ● |
| Gasses, Air, Nitrogen | ● |
| Diluted acids, inorg./org. saline solutions | ● |
| Concentrated acids | X |
| Diluted lyes/alkalies | ● |
| Concentrated lyes/alkalies | X |
| Oils, greases | ● |
| Heat transfer mediums | ● |
| Solvents | ● |
| Organic compounds | ● |
| Adhesives, Bitumen | ● |
| Abrasive mediums | ● |
| Colors, Varnishes | X |

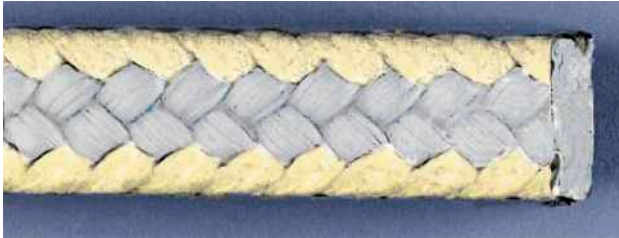
Notes:

K83P made of aramide staple fibers with silicon free lubricant

PACKINGS

RivaKomb-Packing K89

PTFE Multifilament fiber with aramide-reinforced edges and lubricant



static applications

✓ for pumps

for valves

Mechanical Properties

| | | | |
|------------------------|-------|-------------|-------------|
| Maximum Pressure | [bar] | | 50 |
| Maximum Speed | [m/s] | rotating | 15 |
| | | oscillating | 15 |
| Temperature Resistance | [°C] | from | -100 |
| | | to | +280 |

Standard Width approx. mm

| | | | | | | | | | | | | | | |
|---|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 15 | 16 | 18 | 20 | 22 | 24 | 25 |
| - | 26 | 40 | 58 | 102 | 160 | 230 | 314 | 360 | 410 | 518 | 640 | 774 | 922 | 1000 |

Weight per meter in g

Notes:

Predominantly intended for piston pumps.

K86 without lubricant.

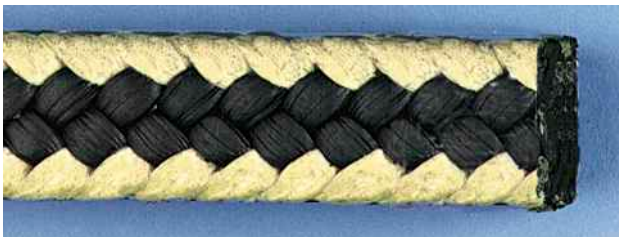
Uses

● = applicable ○ = conditionally applicable X = not applicable

| | |
|---|---|
| Drinking water, Foodstuffs | ○ |
| Water, Sewage, Boiler Feed Water | ● |
| Gasses, Air, Nitrogen | ● |
| Diluted acids, inorg./org. saline solutions | ○ |
| Concentrated acids | X |
| Diluted lyes/alkalies | ○ |
| Concentrated lyes/alkalies | X |
| Oils, greases | ● |
| Heat transfer mediums | ● |
| Solvents | ● |
| Organic compounds | ● |
| Adhesives, Bitumen | ● |
| Abrasive mediums | ● |
| Colors, Varnishes | X |

RivaKomb-Packing K90

PTFE with incorporated graphite, anti-friction lubricant and aramide-reinforced edges



static applications

✓ for pumps

for valves

Mechanical Properties

| | | | |
|------------------------|-------|-------------|-------------|
| Maximum Pressure | [bar] | | 200 |
| Maximum Speed | [m/s] | rotating | 10 |
| | | oscillating | 10 |
| Temperature Resistance | [°C] | from | -200 |
| | | to | +280 |

Standard Width approx. mm

| | | | | | | | | | | | | | | |
|---|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 15 | 16 | 18 | 20 | 22 | 24 | 25 |
| - | 25 | 40 | 58 | 102 | 160 | 230 | 313 | 360 | 409 | 518 | 640 | 774 | 920 | 1000 |

Weight per meter in g

Notes:

Predominantly intended for piston pumps.

K90E without anti-friction lubricant.

Uses

● = applicable ○ = conditionally applicable X = not applicable

| | |
|---|---|
| Drinking water, Foodstuffs | ○ |
| Water, Sewage, Boiler Feed Water | ● |
| Gasses, Air, Nitrogen | ● |
| Diluted acids, inorg./org. saline solutions | ○ |
| Concentrated acids | X |
| Diluted lyes/alkalies | ○ |
| Concentrated lyes/alkalies | X |
| Oils, greases | ● |
| Heat transfer mediums | ● |
| Solvents | ● |
| Organic compounds | ● |
| Adhesives, Bitumen | ● |
| Abrasive mediums | ● |
| Colors, Varnishes | X |

PACKINGS

RivaBrid-Packing K91

TWARON®- und GFO®-fiber manufactured in hybrid braiding



Mechanical Properties

| | | | |
|------------------------|-------|-------------|-------------|
| Maximum Pressure | [bar] | | 200 |
| Maximum Speed | [m/s] | rotating | 20 |
| | | oscillating | 3 |
| Temperature Resistance | [°C] | from | -200 |
| | | to | +280 |

Standard Width approx. mm

| | | | | | | | | | | | | | | |
|---|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 15 | 16 | 18 | 20 | 22 | 24 | 25 |
| - | 25 | 40 | 58 | 102 | 160 | 230 | 313 | 360 | 409 | 518 | 640 | 774 | 920 | 1000 |

Weight per meter in g

Notes:

Other material combinations are available for delivery as hybrid braiding:

K92 of PTFE Multifilament-GFO fiber;

K93 of PTFE Multifilament fiber and TWARON fiber

static applications

✓ for pumps

for valves

Uses

● = applicable ○ = conditionally applicable X = not applicable

| | |
|---|---|
| Drinking water, Foodstuffs | ○ |
| Water, Sewage, Boiler Feed Water | ● |
| Gasses, Air, Nitrogen | ● |
| Diluted acids, inorg./org. saline solutions | ● |
| Concentrated acids | X |
| Diluted lyes/alkalies | ● |
| Concentrated lyes/alkalies | X |
| Oils, greases | ● |
| Heat transfer mediums | ● |
| Solvents | ● |
| Organic compounds | ● |
| Adhesives, Bitumen | ● |
| Abrasive mediums | ○ |
| Colors, Varnishes | ● |

RivaTherm Packing K 95

Made of flexible graphite



Mechanical Properties

| | | | |
|------------------------|-------|-------------|-------------|
| Maximum Pressure | [bar] | | 300 |
| Maximum Speed | [m/s] | rotating | 30 |
| | | oscillating | 10 |
| Temperature Resistance | [°C] | from | -200 |
| | | to | +450 |

Standard Width approx. mm

| | | | | | | | | | | | | | | |
|---|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 15 | 16 | 18 | 20 | 22 | 24 | 25 |
| - | 16 | 25 | 36 | 64 | 100 | 144 | 196 | 225 | 256 | 324 | 400 | 484 | 576 | 625 |

Weight per meter in g

Notes:

With steam up to 650 °C. Regarding the pressure load, we recommend the series of antiextrusion rings from **K99**, **K100** or **K80S**. **K95i** with chrome-nickel supporting wires.

static applications

✓ for pumps

✓ for valves

Uses

● = applicable ○ = conditionally applicable X = not applicable

| | |
|---|---|
| Drinking water, Foodstuffs | ● |
| Water, Sewage, Boiler Feed Water | ● |
| Gasses, Air, Nitrogen | ● |
| Diluted acids, inorg./org. saline solutions | ● |
| Concentrated acids | ○ |
| Diluted lyes/alkalies | ● |
| Concentrated lyes/alkalies | ● |
| Oils, greases | ● |
| Heat transfer mediums | ● |
| Solvents | ● |
| Organic compounds | ● |
| Adhesives, Bitumen | ○ |
| Abrasive mediums | ○ |
| Colors, Varnishes | ● |

PACKINGS

RivaTherm Packing K 100

Flexible graphite with high-temperature-tolerant metal reinforcement



- static applications
- for pumps
- for valves

Mechanical Properties

| | | | |
|------------------------|-------|-------------|-------------|
| Maximum Pressure | [bar] | | 500 |
| Maximum Speed | [m/s] | rotating | 5 |
| | | oscillating | 2 |
| Temperature Resistance | [°C] | from | -200 |
| | | to | +550 |

Standard Width approx. mm

| | | | | | | | | | | | | | | |
|---|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 15 | 16 | 18 | 20 | 22 | 24 | 25 |
| - | 19 | 30 | 43 | 77 | 120 | 173 | 235 | 270 | 307 | 389 | 480 | 580 | 690 | 750 |

Weight per meter in g

Notes:

With steam up to a max. 650°C.

Specially intended as antiextrusion ring.

Uses

● = applicable ○ = conditionally applicable X = not applicable

| | |
|---|---|
| Drinking water, Foodstuffs | ● |
| Water, Sewage, Boiler Feed Water | ● |
| Gasses, Air, Nitrogen | ● |
| Diluted acids, inorg./org. saline solutions | ○ |
| Concentrated acids | ○ |
| Diluted lyes/alkalies | ● |
| Concentrated lyes/alkalies | ○ |
| Oils, greases | ● |
| Heat transfer mediums | ● |
| Solvents | ● |
| Organic compounds | ● |
| Adhesives, Bitumen | ● |
| Abrasive mediums | ○ |
| Colors, Varnishes | ● |

RivaGlas-Packing K450G

Glass fiber with a special graphite impregnation



- static applications
- for pumps
- for valves

Mechanical Properties

| | | | |
|------------------------|-------|-------------|-------------|
| Maximum Pressure | [bar] | | 20 |
| Maximum Speed | [m/s] | rotating | - |
| | | oscillating | - |
| Temperature Resistance | [°C] | from | -40 |
| | | to | +450 |

Standard Width approx. mm

| | | | | | | | | | | | | | | |
|---|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 15 | 16 | 18 | 20 | 22 | 24 | 25 |
| - | 22 | 33 | 49 | 86 | 135 | 195 | 265 | 305 | 346 | 438 | 540 | 653 | 775 | 844 |

Weight per meter in g

Bemerkungen:

K550 with a special glass fiber and chrome-nickel core, up to 550 °C.

Also deliverable graphitated as **K550G**.

K1000 also special glass-silicate fiber, up to 1000 °C.

Uses

● = applicable ○ = conditionally applicable X = not applicable

| | |
|---|---|
| Drinking water, Foodstuffs | X |
| Water, Sewage, Boiler Feed Water | ○ |
| Gasses, Air, Nitrogen | ○ |
| Diluted acids, inorg./org. saline solutions | ○ |
| Concentrated acids | X |
| Diluted lyes/alkalies | ○ |
| Concentrated lyes/alkalies | X |
| Oils, greases | ● |
| Heat transfer mediums | ○ |
| Solvents | ● |
| Organic compounds | ● |
| Adhesives, Bitumen | ○ |
| Abrasive mediums | ○ |
| Colors, Varnishes | X |

PACKINGS

Braided Packing Rings



Compression molded packing rings provide the technically best solution and are, in addition, a good value. Through our compression machines, each ring for different operating conditions is optimally precompressed.

Several thousand forms are available in increments of a few tenths of a millimetre, so that an appropriate tool is generally available for packing rings for reground spindles, rods or shafts.

Advantages of the compression molded packing rings

- » Less material, Avoidance of cutting mistakes, No waste with bulk stock
- » small gland packing strengths with little friction and a long lifetime
- » quick assembly: therefore small assembly costs and less downtime
- » highest possible dimension accuracy

With the assembly of precompressed, slotted packing rings, you have to be careful that the ring never gets bent. It is in axial position in order to open the diameter of the shaft cross section.

