APOLLON CATALOGUE HYDRAULIC SEALS

Gaskets and seals are our passion





All the hydraulic and pneumatic gaskets you need for your application

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Your reliable partner for sealing technology CUSTOMISED SEALING SYSTEMS AND SOLUTIONS

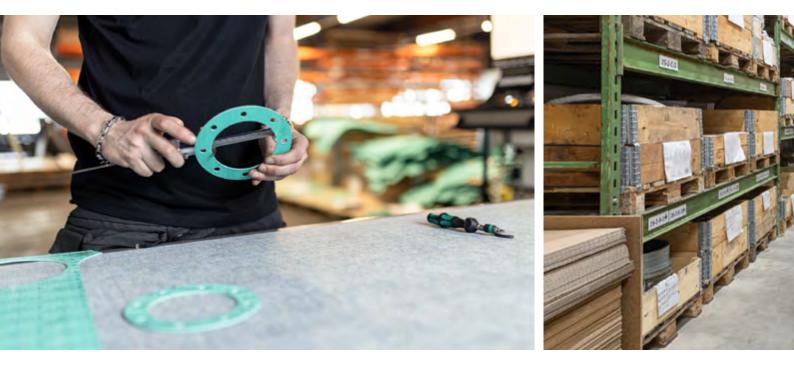
METAL GASKETS • SOFT MATERIAL GASKETS • HYDRAULIC SEALS • PACKINGS AND PACKING RINGS



Sustainable management means minimising environmental impact as far as possible. Accordingly, industrial processes today are planned in such a way that resources and the environment are conserved. This also corresponds to the principle of optimised calculation, manufacturing and processing procedures. In terms of tightness, leaks mean material and energy losses. To avoid this, seals are indispensable.

Gaskets and seals are our passion. When producing our gaskets and seals, we focus on flawless function and a long service life. Our modern production facility in Hamburg for standard gaskets and customised products based on customer requirements or samples, as well as

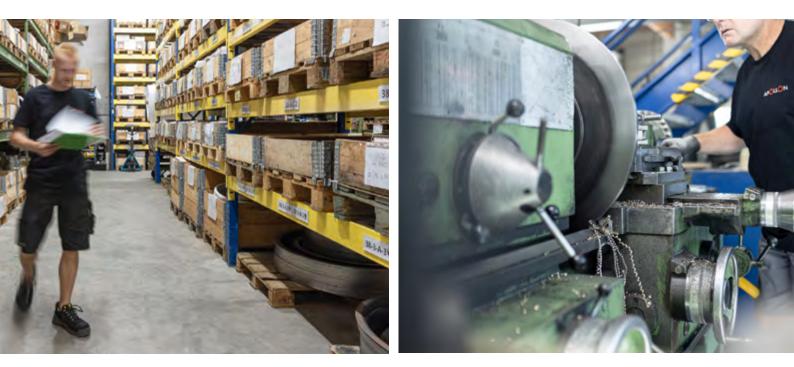
our extremely wide-ranging warehouse. make us a reliable partner for a wide range of industries.



We manufacture high-quality sealing systems on CNC machines, laser cutting systems and flatbed plotters. We produce ring joint gaskets, spiral wound gaskets, grooved gaskets, metallic flat gaskets and non-metallic flat gaskets based on graphite, fibre or PTFE.

We are also a reliable supplier partner for lens gaskets, corrugated gaskets, rubber-steel gaskets, rod seals, piston seals, wipers, rotor seals, bearing and seal rings, O-rings, graphite rings, packings and packing rings.

We keep all this and more in stock for your short-term requirements, if necessary as merchandise from well-known manufacturers. We respond quickly to your enquiries so that you receive the prices you need immediately. You set the standard: order production and delivery from us and, if necessary and possible, your seals will be at your premises the very next morning with UPS Express Plus. If you need it faster? Then we'll send a courier.



HYDRAULIC SEALS



We offer you an extensive range of hydraulic seals in the categories of rod seals, piston seals, wipers, rotor seals, back-up and guide rings as well as a wide range of O-rings.

If required, we would be pleased to put together customised seal kits for you or support you with repairs.

Hydraulic seals ROD SEALS



Rod seals are used in cylinders to seal liquids and provide optimum protection against the ingress of external media. Apollon has a large selection of different profiles made from various materials and material combinations. All have high wear resistance, extrusion properties and temperature resistance.



STA100 Slotted ring rod seal

Slotted ring rod

seal with integrat-

ed angled support

STA110

ring



STA180 Symmetrical lip seal rod seal

STA190

STA200

Symmetrical lip

seal rod seal with

supporting O-ring



STA270 Double-acting rod seal

STA280

Double lip groove ring rod seal with supporting O-ring



STA290 Rod seal with 0-ring

STA300 High-performance rod seal with eneraiser



STA310 Rod seal with O-rina

HUT100 Hat cuff

HUT200

Hat cuff



DA100 Roof gasket set





DA300 Roof gasket set





Flap seal



STA120 Slotted ring rod seal with integrated straight support ring



Symmetrical lip seal rod seal

STA210

Rod seal with 0-ring

> **STA220** Double-lip grooved ring rod seal

STA230 Double-lip grooved ring rod seal with integrated support ring

Grooved ring rod seal with spring

STA250 Double-acting rod

STA260 Symmetrical lip seal rod seal with



STA240

seal

supporting O-ring







STA140 Slotted ring rod seal with integrated bevelled support ring and 0-ring

Slotted ring rod

seal with inte-

grated straight

support ring and

Slotted ring rod

seal pneumatic

Slotted ring rod

seal pneumatic

STA150

0-ring

STA160

STA170

Hydraulic seals PISTON SEALS



Piston seals seal the two cylinder chambers separated from the piston and prevent fluids from escaping from the cylinder. A basic distinction is made between single and double-acting sealing elements.

We have a large selection of profiles and material combinations for use in hydraulics or pneumatics.



piston seal with integrated bevelled support ring

piston seal with integrated straight support ring and

Grooved ring piston seal for pneu-



K0170

KO180

ton seal

K0190

KO200

0-ring

KO210

0-ring

Symmetrical

Symmetrical

grooved ring

piston seal with

Piston seal with

Symmetrical lip

seal piston seal

with supporting

supporting O-ring

grooved ring pis-

Grooved ring piston seal for pneumatics (narrower sealing lips)



KO260

Single-acting high-performance piston seal

KO270

Grooved ring piston seal with spring

KO280 Piston seal with 0-ring



Piston seal with 0-ring

KO300 **High-performance** piston seal

KO310 Piston accumulator seal

KOK100 Four-part compact piston seal

KOK110 Four-part compact piston seal

KOK120 Four-part compact piston seal

KOK130



KOK140

Four-part compact piston seal

KOK150

Four-part compact piston seal

KOK160

Four-part compact piston seal

KOK170

Four-part compact piston seal

KOK180

Four-part compact piston seal

KOK190 Three-part compact piston seal

DA400 Roof cuff

KLA100 Flap seal

T0100 Hat cuff



K0220 Grooved ring piston seal with spring



K0230 Double-acting piston seal



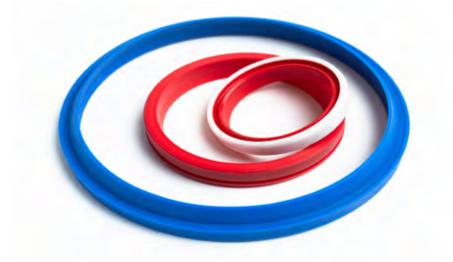


KO250 **High-performance** piston seal



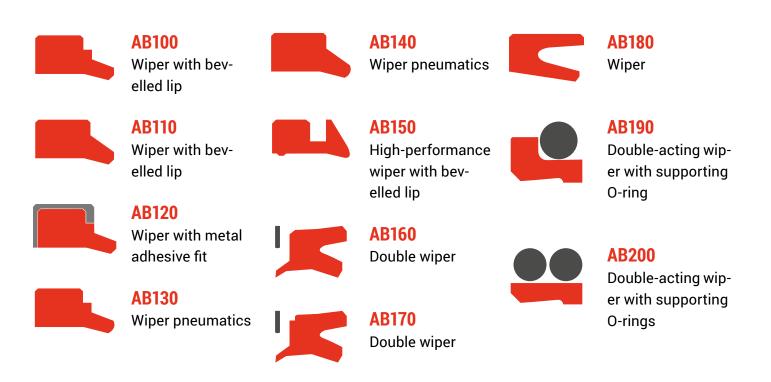
Four-part compact piston seal

Hydraulic seals WIPER SEALS



Single or double-acting wipers are installed in hydraulic cylinders to remove dirt, foreign particles, swarf and moisture from the piston rod entering the system. This extends the service life of the seals and helps to protect the guide parts.

Our sealing systems offer suitable wipers with maximum reliability and durability for all types of cylinders and applications.



Hydraulic seals ROTOR SEALS



Rotor seals are used to seal rotary and swivelling movements of shafts, often under high pressure, against operating fluids such as water, oil and grease. Mainly used in mechanical engineering and the construction machinery industry, a distinction is made between internal and external seals.

We offer a wide selection of the right sealing element for your



RO210 Radial shaft seal with spring and dust lip

R0220 Radial shaft seal



Radial shaft seal with dust lip

- **AX100** Axial seal
- **AX200** Axial seal





V ring



Radial seal with 0-ring

R0170 Radial shaft seal with spring

R0180 Radial shaft seal with spring dust lip

Radial shaft seal

Radial shaft seal with spring

R0190

RO200







application.

R0130 Radial seal

R0140

Radial seal

Radial seal

R0100

R0110

dust lip

R0120

with spring

Radial shaft seal

Radial shaft seal

with spring and







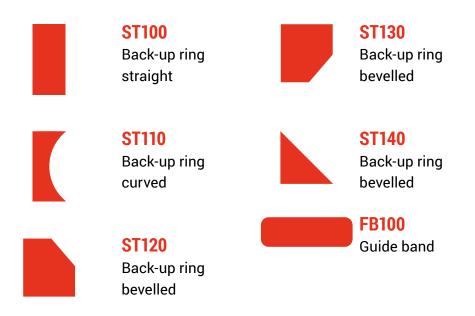
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Hydraulic seals BACK-UP AND GUIDE RINGS



Back-up rings provide the primary seal with optimum protection against extrusion under high pressure loads. This prevents the O-ring from penetrating into the sealing gap. We offer a wide range in endless, slotted or spiralised designs.

Guide rings, on the other hand, as the name suggests, are used to guide the pistons or rods of a hydraulic cylinder. They also compensate for the sometimes high lateral forces, prevent metal-to-metal contact and thus optimise the performance and service life of the sealing system.



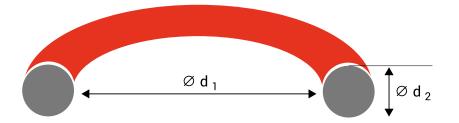
Hydraulic seals O-RINGS



O-rings are made of a ring-shaped elastic material and are installed in a groove to seal both radially and axially in order to seal liquids or gases.

O-rings with the largest possible cord thickness provide an optimum sealing effect.

The choice of material and its degree of hardness depends on the pressure of the liquid or gas, the static or dynamic application, the gap widths and the surface quality of the parts to be connected.



PACKINGS & PACKING RINGS



Packings & packing rings PACKINGS



Stuffing box packings, also known as shaft seals or barrier packings, seal the space between a rotating shaft or rod and its housing. They prevent liquids such as water, oil or chemicals from escaping from the system. They are made of braided fibres, which vary depending on the application and requirements. They are available in natural and synthetic fibres such as cotton, ramie, carbon/graphite, PTFE, PTFE/ara-mid or inorganic glass fibres.

The following parameters must be known when selecting the material: Application, pressure, temperature, fluid and speed. With this information, we can quickly determine the suitable material.

Packings & packing rings PACKING RINGS

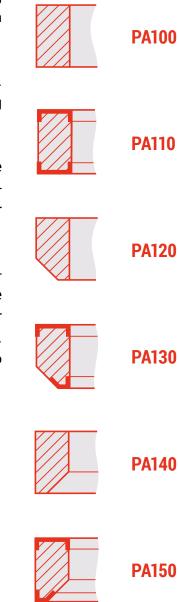


The use of pre-pressed packing rings is recommended for sealing stuffing boxes at the highest temperatures and pressures at which braided packings can no longer be used.

Pre-pressed graphite rings can be used as endless or split versions. The advantage of the split ring is that it is easy to refit without having to completely dismantle the stuffing box gland.

Pure graphite gaskets are widely used in all industrial sectors. They are used wherever high temperatures prevail or where substances characterised by particular aggressiveness are present. They are used, for example, in the manufacture of pumps or exhaust systems.

The versatility of these gaskets in particular makes them so attractive for many applications. For example, pure graphite gaskets can be supplemented with stainless steel flaps or impregnated with PTFE or copper in order to achieve better results and an optimised application. This also includes the use of graphite foil, which makes it possible to maintain sealing quality even at temperatures of more than 450 °C. Sealing cap gaskets profiles



We provide fast and reliable assistance worldwide to protect you from system downtimes.

APOLLON

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