

RUBBER DISK BELLOWS

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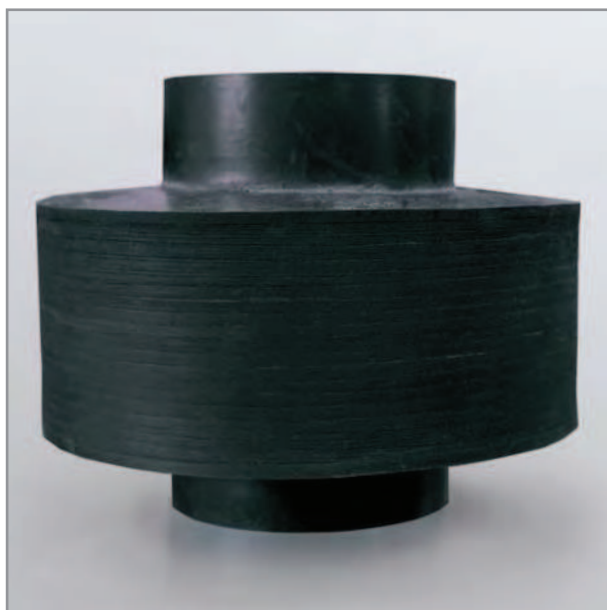
VIEWING SYSTEMS

Rubber disk bellows are of the highest quality and visually the most attractive protective covers for pistons and spindles. They are completely leak proof. Since each rubber disk lies flat on the other, excellent compression dimensions are achieved.

The production of rubber parts depends directly upon the control and monitoring of the production processes. Each process step, from mixing up to rolling out the material, from punching the disks up to the vulcanization process, is performed under the most accurate observation and attention. Stringent quality criteria leads to high process reliability. After vulcanizing, the rubber disk bellows are ground on the outside, so that they have an absolutely smooth surface when closed.

Material

Good resistance to light and atmospheric conditions and are well suited to outside use. If emphasis is on oil or coolant protection in your area of application, then we recommend the use of NBR rubber foil. Alternative materials are available for high temperature requirements.



Compression of Rubber disk bellow

Types

For standard types of this bellow round profiles will be used. As an alternative, square, rectangular or oval profiles can also be produced.

Dimensions

Rubber disk bellows are supplied in standard sizes with inside diameters of 20 to 400 mm and outside diameters of 40 to 480 mm.



Rubber disk bellow

We supply the bellows in 5 mm graduation up to a diameter of 200 mm and in 10 mm graduation above this. The extended length of the rubber disk bellows can be up to 10 metres.

Mounting

Rubber disk bellows are fastened the same as other bellow types with sleeve or metal flange.

Design

With large extension length and horizontal installation, it is usually necessary to use additional guide elements. In the most simple case, the bellows are stabilized by internal wire rings.

In more complex applications, guiding systems with rods or cables can be incorporated internally externally to the bellows.

When mounting these bellows please pay attention to sufficient aeration.

Construction

Calculation formulae

$$L_{\max} = FZ \times FB$$

$$L_{\min} = FZ \times 2,5$$

$$FB = \frac{(AD - ID)}{2}$$

$$FZ = \frac{L_{\max}}{FB}$$

$$FZ = \frac{Hub}{(FB - 2,5)}$$