



## V-ring seal VS

### DESCRIPTION

- Stiffening body, joint and sealing lip
- Reinforced stiffener

### FUNCTION

- Sealing against dust, dirt, grease, oil or water splashes
- Protects radial shaft seals or bearings from abrasive ambient conditions as a primary sealing element (lip seal or flinger ring)
- Good for use in combination with rotary shaft seals

### APPLICATIONS

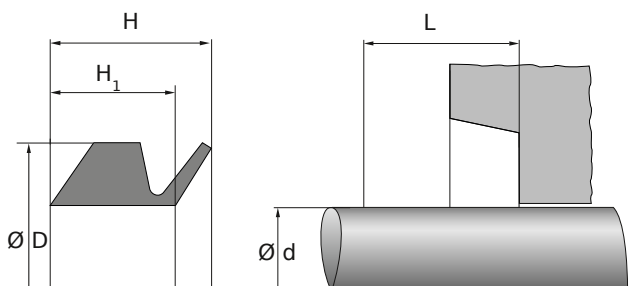
- General mechanical and plant engineering
- Plant engineering
- Drive technology
- Electric motors
- Gearboxes
- Bearing pedestal seal
- Agricultural machinery
- Rolling mills

### PRODUCT ADVANTAGES

- Good dynamic sealing effect
- Low requirements on surface quality of the mating surface
- Reliable design with broad application spectrum for moderately demanding applications in general industry
- Compensation of small axial movements as well as angular and radial misalignments
- Good price/performance ratio
- Manufactured by certified external suppliers
- Friction decreases with increasing peripheral speed

### CONFORMITY AND CERTIFICATES

- Please consult the material data sheet valid for the respective material for current information on approvals and certificates, as this information depends on the compound and cannot be listed exhaustively here.





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### DESIGN GUIDELINE

- Design of the installation space is recommended in accordance with DIN 3760.
- No surface shape deviations or defects such as sharp edges, burrs, cavities, waviness, elevations, or damage are permitted
- Shaft surface roughness  $R_z = 1.0$  to  $4.0 \mu\text{m}$
- Shaft tolerance zone: ISO h11
- Hardness of shaft surface min. 45 HRC
- Housing surface roughness  $R_z = 10$  to  $20 \mu\text{m}$
- Hardness of the mating surface depending on material and medium: Structural steel and sludge: 125 - 150 HV | Gray cast iron and sludge, dust: 190 - 270 HV | Cast bronze and water, dust: 100 - 160 HV | Die-cast aluminum and splash water: 90 - 160 HV | Stainless steel

### INSTALLATION GUIDELINE

- Deburr sharp edges, provide with seamless chamfers and radii
- V-ring can be temporarily expanded by up to 20% for installation

### STORAGE ADVISE

- Storage temperature  $< 25^\circ\text{C}$
- No direct heat sources
- No direct sunlight
- No condensation in the storage room
- No exposure to ozone or ionizing radiation
- Recommendations based on the revision of ISO 2230 dated 16.09.1992



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### Circumferential speed [m/s]

| NBR                    | FKM                      |
|------------------------|--------------------------|
| 8                      | 6.5                      |
| $8 \leq x \leq 12$ (a) | $6.5 \leq x \leq 10$ (a) |
| $12 \leq x$ (b)        | $10 \leq x$ (b)          |

a = axially secured

b = radially secured

### Temperature [°C]

| NBR       | FKM       |
|-----------|-----------|
| -40...100 | -20...200 |

The values given are based on a limited number of tests on standard test specimens (2 mm sample plates) from laboratory production. The data determined from finished parts may deviate from the above values depending on the manufacturing process and the part geometry.

The information provided herein is based on laboratory tests and on data sources deemed reliable. It constitutes general, non-binding guideline values and does not represent any guarantee of specific properties or suitability for a particular purpose. The suitability of a product for a specific application depends on the actual operating conditions and a variety of factors. Full testing and performance evaluation of the final product are the responsibility of the user. Freudenberg FST GmbH | [www.fst.com](http://www.fst.com)



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