

# Simmerring Combi Seal SF5

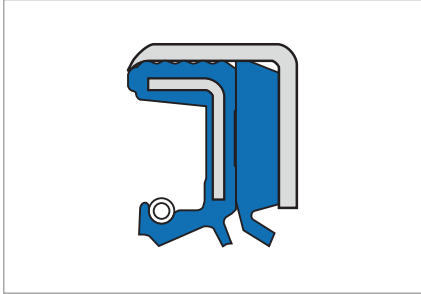


Fig. 1 Simmerring Combi Seal SF5

## Product description

- Design: special types, on enquiry
- Combination of a Simmerring and an additional seal against dirt from the outside in one housing
- Spring-loaded sealing lip
- Additional dust lip
- Primarily for usage in all applications with high level of soiling, e.g., in axles for off-road vehicles
- Use preferably instead of the Simmerring Cassette Seal in case of superimposed rotational and translation movements.

## Product advantages

- Long service life
- High resistance to dirt ingress due to the optimal positioning of sealing lip and dust lip.

## Performance in Relation to Dirt from the Outside

- High resistance to dirt from the outside. Suitable for protection against sludge.

## Application

- Agricultural machinery
- Drives for agricultural vehicles and in general industry
- Drives for rotating, sometimes running shafts in dry application areas.

## Material

### Acrylonitrile-butadiene rubber

<b>Code</b>	75 NBR 106200
<b>Colour</b>	Black
<b>Hardness</b>	75 Shore A

### Fluoro elastomer

<b>Code</b>	75 FKM 595
<b>Colour</b>	Red brown
<b>Hardness</b>	75 Shore A

<b>Metal insert</b>	Unalloyed steel DIN 1624 – EN10139
<b>Spring</b>	Spring steel 17223
<b>Dirt wiper</b>	Polyurethane (AU)

## Operating conditions

Materials combination	NBR/AU	FKM/AU
<b>T</b>	to +80 °C	to +100 °C
<b>v</b>	to 4 m/s	to 6 m/s
<b>p</b>	max. 0,05 MPa/0,5 bar	max. 0,05 MPa/0,5 bar

For material definitions, it must be taken into account that it is possible that not all extreme conditions will occur simultaneously.

## Fitting & installation

### Shaft

<b>Tolerance</b>	ISO h 11
<b>Runout</b>	IT 8
<b>Roughness</b>	$R_a = 0,2 \dots 0,8 \mu\text{m}$
	$R_z = 1,0 \dots 5,0 \mu\text{m}$
	$R_{\text{max}} = \leq 6,3 \mu\text{m}$
<b>Hardness</b>	45 ... 60 HRC
<b>Finish</b>	No lead; preferably plunge ground

### Housing bore

<b>Tolerance</b>	ISO H8
<b>Roughness</b>	$R_z = 10 \dots 16 \mu\text{m}$

Careful fitting according to DIN 3760 is a prerequisite for the correct function of the seal → Technical Manual.

The use of sealing material on the outer diameter is recommended for the fitting.

Further information on enquiry.

## Range of dimensions for shafts-Ø D<sub>1</sub>

<b>Simmerring Combi Seal SF5</b>	35 ... 120 mm
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## Article list

$D_1$	$D_2$	b	Material	Article No.	
35	50	13	72 NBR 902	12013947	<input type="radio"/>
40	68	14	72 NBR 902	12013319	<input type="radio"/>
45	62	11,2	72 NBR 902	12016814	<input type="radio"/>

● Available from stock    ○ On request: Tool is available, delivery at short notice