

# Simmerring BADUO

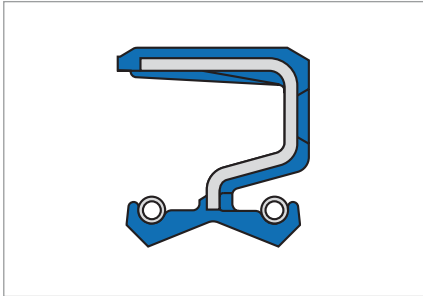


Fig. 1 Simmerring BADUO NBR

## Product description

- Outer casing: elastomer
- Two spring-loaded sealing lips.

## Product advantages

- Sealing for the separation of two media
- Small housing
- Two spring-loaded sealing lips (one spring-loaded dust lip against moderate to medium dust and dirt ingress)
- Reliable sealing of the housing bore, even with increased roughness of the bore, thermal expansion and split housings.

## Application

- Machine tools
- Power take-off gears in agricultural and construction machinery transmissions and axles.

## Material

Acrylonitrile-butadiene rubber

<b>Code</b>	72 NBR 902
<b>Hardness</b>	72 Shore A
<b>metal insert</b>	Unalloyed steel DIN EN 10027-1*
<b>Spring</b>	Spring steel DIN EN 10270-1*

\* Individual dimensions have two metal inserts or one metal insert in the matched form. 75 FKM 585 and 75 FKM 595 on enquiry.

## Operating conditions

<b>Media</b>	Mineral oils, synthetic oils*, greases
<b>T</b>	-40 ... +100 °C short term up to... +120 °C
<b>v</b>	to 5 m/s
<b>P</b>	to 0,05 MPa/0,5 bar

\* With synthetic oils (polyalkylene glycols/polyalphaolefins, → Technical Manual synthetic lubricants) it is to be noted that the maximum operating temperature of 80 °C must not be exceeded.

Max. permissible values depend on the other operating conditions.

## Fitting & installation

### Shaft

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

### Housing bore

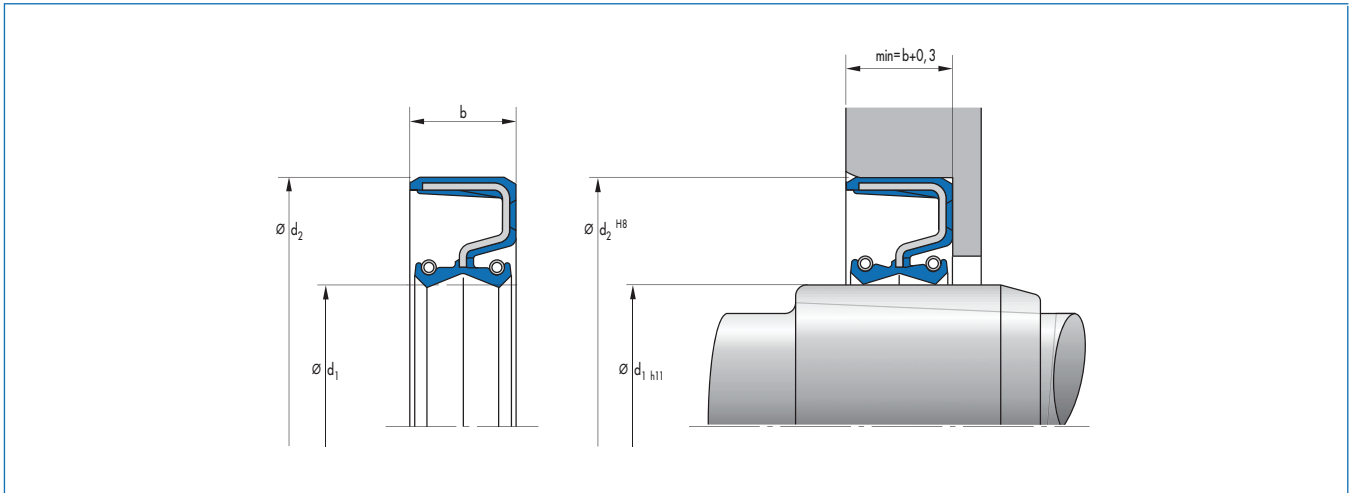
<b>Tolerance</b>	ISO H8
<b>Roughness</b>	$R_z = 10 \dots 25 \mu\text{m}$

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

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

<b>Simmerring BADUO</b>	25 ... 150 mm
-------------------------	---------------

Article list



$d_1$	$d_2$	$b$	DIN 3761	Outer surface	Pressure	Material	Article No.	
20	40	14	A	smooth	0,05	72 NBR 902	7147	○
25	35	7	A	smooth	0,05	72 NBR 902	3473	○
25	45	14	A	smooth	0,05	72 NBR 902	7453	○
30	45	8,5	A	smooth	0,05	72 NBR 902	3475	○
30	62	14	A	smooth	0,05	72 NBR 902	7786	○
35	62	14	A	smooth	0,05	72 NBR 902	8058	○
35	62	14	A	smooth	0,05	75 FKM 595	338716	○
40	65	20	A	smooth	0,05	72 NBR 902	8300	○
45	62	14	A	smooth	0,05	72 NBR 902	32896	○
55	75	15	A	smooth	0,05	72 NBR 902	8817	○
75	90	15	A	smooth	0,05	72 NBR 902	9162	○
110	150	18	A	smooth	0,05	72 NBR 902	9389	○
118	140	16	A	smooth	0,05	72 NBR 902	9406	○
120	150	16	A	smooth	0,05	72 NBR 902	370744	○
540	585	30	A	smooth	0,05	72 NBR 902	319550	○

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