

# Merkel Water Guard WA Type A

## Product description

The seal function is produced by an axial, wear resistant sealing lip. Type A is the standard version for small housings.

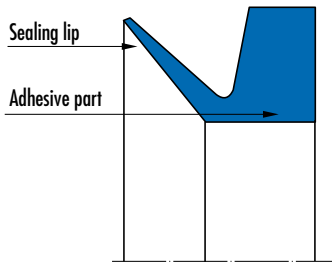
## Product advantages

Water guard seals for use with roll mill bearings for grease retention and exclusion of dust, scale, water, water/oil emulsions and similar media

- very low friction
- large axial operating movement
- easy installation.

## Application

Rolling mills.



## Material

Material	Designation
NBR	60 NBR B297

Material	Designation
FKM	65 FKM K698

FKM on request.

## Operating conditions

Material	60 NBR B297	65 FKM K698
Temperature range in °C		
Mineral oils		–
Water	+5 ... +100	+5 ... +80
Lubricating greases	–40 ... +100	–20 ... +150
Rolling oil emulsion		–
Pressure p in MPa		0,03
Sliding speed v in m/s		20*

\* The indication is based on stationary water guards. Rotary seals have different limits

## Surface quality

Surface roughness	R <sub>a</sub>	R <sub>max</sub>
Sliding surface	0,8 µm	≤4 µm
Housing	≤4 µm	≤16 µm

The surface hardness of the sliding surface should be approx. 30 HRC.  
Percentage contact area M<sub>r</sub> > 50% up to max. 90% at cutting depth c = Rz/2 and reference line C ref = 0%.

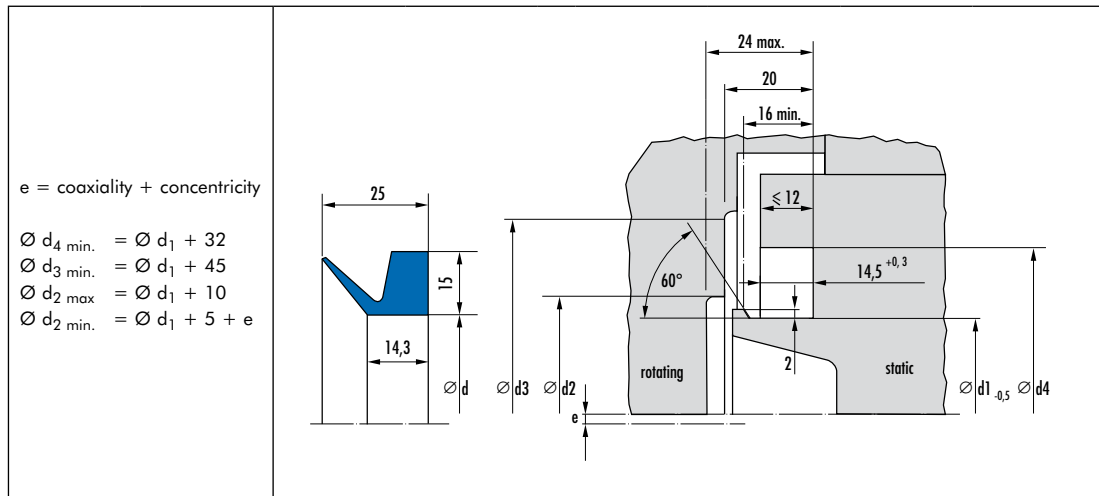
### Design notes

Please observe our general design notes in → Simrit Standard Catalogue, Merkel Hydraulics – Technical Principles.

### Fitting & installation

Careful fitting is a prerequisite for correct function of the seal. → Simrit Standard Catalogue, Merkel Hydraulics – Technical Principles.

Article list



Designation	d1	d	Article No.	Designation	d1	d	Article No.
WA-200 A	190 - 210	180	24367596	WA-1000 A	965 - 1015	910	24367617
WA-220 A	210 - 235	198	24367597	WA-1050 A	1015 - 1065	955	24367618
WA-250 A	235 - 265	225	24367598	WA-1100 A	1065 - 1115	1000	24367619
WA-275 A	265 - 290	247	24367599	WA-1150 A	1115 - 1165	1045	24367620
WA-300 A	290 - 310	270	24367600	WA-1200 A	1165 - 1215	1090	24367621
WA-325 A	310 - 335	292	24367601	WA-1250 A	1215 - 1270	1135	24367622
WA-350 A	335 - 365	315	24367602	WA-1300 A	1270 - 1320	1180	24367623
WA-375 A	365 - 390	337	24367603	WA-1350 A	1320 - 1370	1225	24367624
WA-400 A	390 - 430	360	24367604	WA-1400 A	1370 - 1420	1270	24367625
WA-450 A	430 - 480	405	24367605	WA-1450 A	1420 - 1470	1315	24367626
WA-500 A	480 - 530	450	24367606	WA-1500 A	1470 - 1520	1360	24367627
WA-550 A	530 - 580	495	24367607	WA-1550 A	1520 - 1570	1405	24367628
WA-600 A	580 - 630	540	24367608	WA-1600 A	1570 - 1620	1450	24367629
WA-650 A	630 - 665	600	24367609	WA-1650 A	1620 - 1670	1495	24367631
WA-700 A	665 - 705	630	24367610	WA-1700 A	1670 - 1720	1540	24367632
WA-725 A	705 - 745	670	24367611	WA-1750 A	1720 - 1770	1585	24367633
WA-750 A	745 - 785	705	24367612	WA-1800 A	1770 - 1820	1630	24367634
WA-800 A	785 - 830	745	24367613	WA-1850 A	1820 - 1870	1675	24367635
WA-850 A	830 - 875	785	24367614	WA-1900 A	1870 - 1920	1720	24367636
WA-900 A	875 - 920	825	24367615	WA-1950 A	1920 - 1970	1765	24367637
WA-950 A	920 - 965	865	24367616	WA-2000 A	1970 - 2020	1810	24367638

Ordering example

Article No.	Designation	d1	d	Material
24367638	WA-2000 A	1970 - 2020	1810	NBR