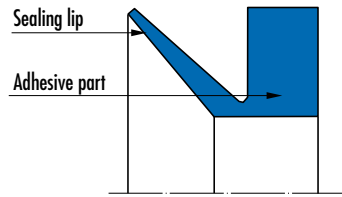


# Merkel Water Guard WA Type AX

## Product description

The seal function is produced by an axial, wear resistant sealing lip. Typ AX is for heavy loads and large movements.



## 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	on enquiry	
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>f</sub> > 50% up to max. 90% at cutting depth c = Rz/2 and reference line C ref = 0%.

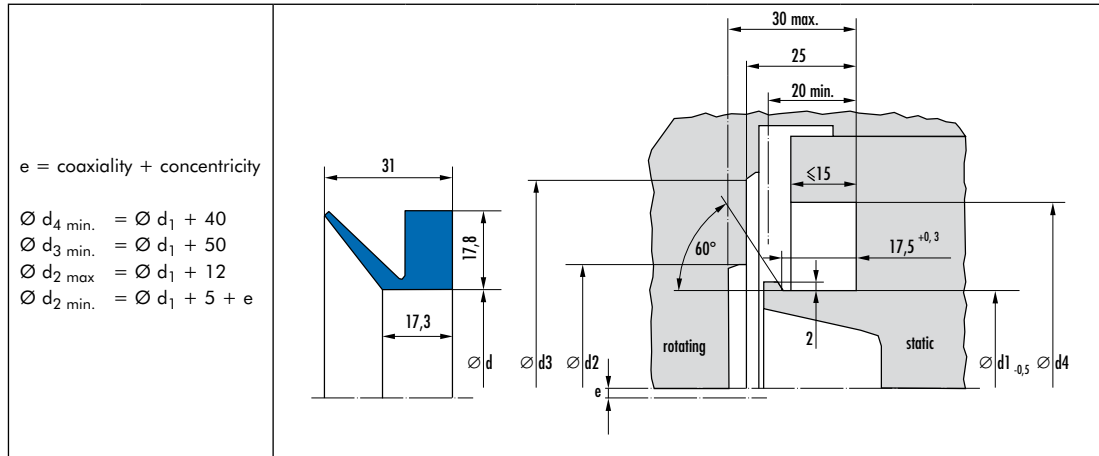
### Design notes

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 AX	200 - 205	192	24367800	WA-700 AX	665 - 705	630	24367827
WA-205 AX	205 - 210	196	24367801	WA-725 AX	705 - 745	670	24367828
WA-210 AX	210 - 215	200	24367802	WA-750 AX	745 - 785	705	24367829
WA-215 AX	215 - 219	204	24367803	WA-800 AX	785 - 830	745	24367830
WA-220 AX	219 - 224	207	24367804	WA-850 AX	830 - 875	785	24367831
WA-225 AX	224 - 228	211	24367805	WA-900 AX	875 - 920	825	24367832
WA-230 AX	228 - 232	215	24367806	WA-950 AX	920 - 965	865	24367833
WA-235 AX	232 - 236	219	24367807	WA-1000 AX	965 - 1015	910	24367834
WA-240 AX	236 - 240	223	24367808	WA-1050 AX	1015 - 1065	955	24367835
WA-250 AX	240 - 250	227	24367809	WA-1100 AX	1065 - 1115	1000	24367836
WA-260 AX	250 - 260	236	24367810	WA-1150 AX	1115 - 1165	1045	24367837
WA-270 AX	260 - 270	245	24367811	WA-1200 AX	1165 - 1215	1090	24367838
WA-280 AX	270 - 281	255	24367812	WA-1250 AX	1215 - 1270	1135	24367839
WA-290 AX	281 - 292	265	24367813	WA-1300 AX	1270 - 1320	1180	24367840
WA-300 AX	292 - 303	275	24367814	WA-1350 AX	1320 - 1370	1225	24367841
WA-310 AX	303 - 313	285	24367815	WA-1400 AX	1370 - 1420	1270	24367842
WA-320 AX	313 - 325	295	24367816	WA-1450 AX	1420 - 1470	1315	24367843
WA-330 AX	325 - 335	305	24367817	WA-1500 AX	1470 - 1520	1360	24367844
WA-340 AX	335 - 345	315	24367818	WA-1550 AX	1520 - 1570	1405	24367845
WA-350 AX	345 - 355	322	24367819	WA-1600 AX	1570 - 1620	1450	24367846
WA-360 AX	355 - 372	328	24367820	WA-1650 AX	1620 - 1670	1495	24367847
WA-380 AX	372 - 390	344	24367821	WA-1700 AX	1670 - 1720	1540	24367848
WA-400 AX	390 - 415	360	24367822	WA-1750 AX	1720 - 1770	1585	24367849
WA-425 AX	415 - 443	385	24367823	WA-1800 AX	1770 - 1820	1630	24367850
WA-450 AX	443 - 480	410	24362938	WA-1850 AX	1820 - 1870	1675	24367851
WA-500 AX	480 - 530	450	24367824	WA-1900 AX	1870 - 1920	1720	24367852
WA-550 AX	530 - 580	495	24367825	WA-1950 AX	1920 - 1970	1765	24367853
WA-600 AX	580 - 630	540	24362939	WA-2000 AX	1970 - 2020	1810	24367854
WA-650 AX	630 - 665	600	24367826				

Ordering example

Article No.	Designation	d1	d	Material
24367854	WA-2000 AX	1970 - 2020	1810	NBR