

Merkel Rotomatic M 17

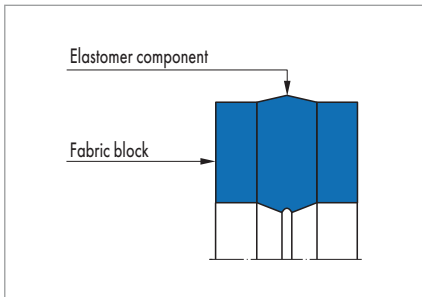


Fig. 1 Merkel Rotomatic M 17

Product description

Single-piece Merkel sealing ring comprising an elastomer part firmly set by fabric blocks on both sides which is provided with an oil groove at the contact area.

Product advantages

Double-acting rod seal for pivoting motions in hydraulic systems, preferably for usage in hydraulic joints and rotary joints

- Wear-resistant
- Secure static sealing.

Application

Excavators, grippers, rotary joints.

Material

Material	Code
Nitrile rubber NBR	80 NBR B246/BI-NBR B3B248

Operating conditions

Material	80 NBR B246/BI-NBR B3B248
Temperature range in °C	
Hydraulic oils HL, HLP	-30 ... +80
HFA fluids	+5 ... +60
HFB fluids	+5 ... +60
HFC fluids	-30 ... +60
HFD fluids	-
Water	+5 ... +80
HETG (rapeseed oil)	-30 ... +80
HEES (synthetic esters)	-30 ... +80
HEPG (glycol)	-30 ... +60
Mineral greases	-30 ... +80
Pressure p in MPa	20
Running speed v in m/s	0,1

If the seal set is to be used for permanent rotational movement, please consult us first. Other material combinations are available on request.

Surface quality

Surface roughness	R _a	R _{max}
Sliding surface	0,05 ... 0,3 µm	≤2,5 µm
Groove base	≤1,6 µm	≤6,3 µm
Groove flanks	≤3,0 µm	≤15,0 µm

The surface hardness must be approx. 45 to 60 HRC (depth of hardening min. 0,5 mm). Percentage contact area M_c >50% to max 90% at cutting depth c = Rz/2 and reference line C ref = 0%. Abrasive surfaces, ridges, scratches and blow-holes are to be avoided.

Design notes

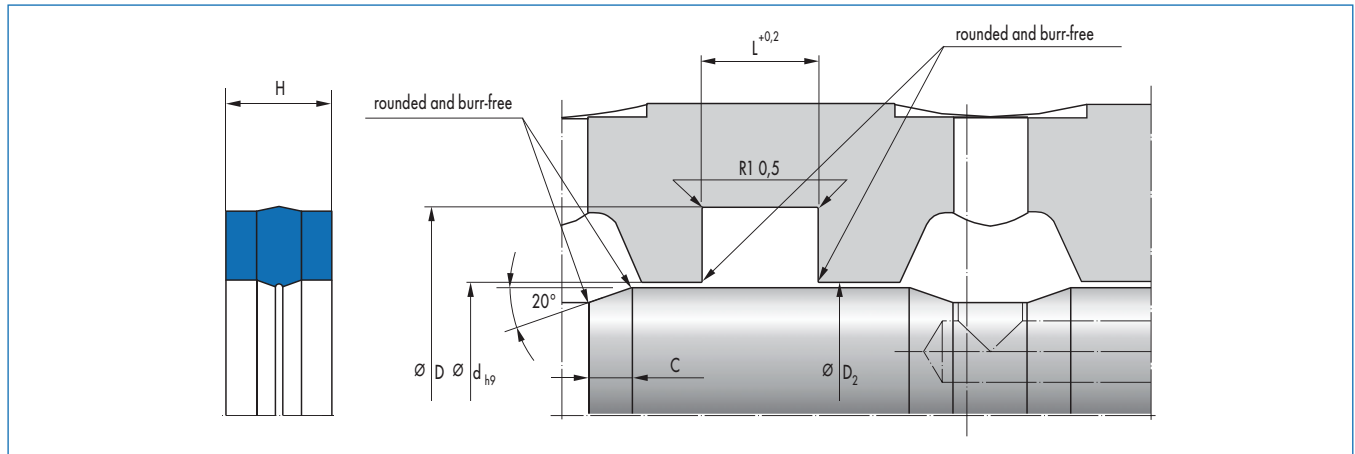
Please observe our general design notes in → Technical Manual.

Tolerance recommendation

Recommended fit for pressures up to 20 MPa

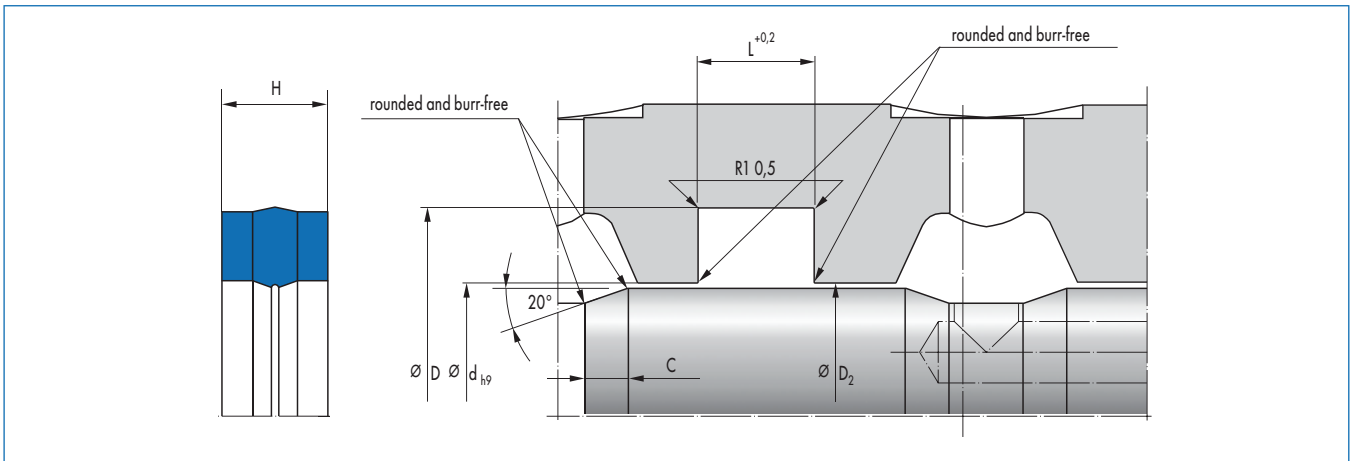
Nominal Ø d	Borehole	Shaft	Groove base
... 60	H8	f8	H9
>60	H7	f7	H9

Article list



d	D	L	C	Profile	Material	Article No.	
10	18	6,5	3	4	80 NBR B246	24024279	●
20	28	6,5	2,5	4	80 NBR B246	24024285	●
22	30	6,5	2,5	4	80 NBR B246	24024286	●
25	35	8	3	5	80 NBR B246	24024287	●
28	38	8	3	5	80 NBR B246	24024288	○
30	40	8	3	5	80 NBR B246	24024289	●
32	42	8	3	5	80 NBR B246	24024290	●
35	45	8	3	5	80 NBR B246	24024291	●
36	46	8	3	5	80 NBR B246	24024292	○
40	52	8	3	6	80 NBR B246	24024212	●
42	54	8	3	6	80 NBR B246	24024293	●
45	57	8	3	6	80 NBR B246	24024294	●
50	62	8	3	6	80 NBR B246	24024295	●
55	67	8	3	6	80 NBR B246	24024296	●
56	68	8	3	6	80 NBR B246	24024297	●
60	75	11	3,5	7,5	80 NBR B246	24024298	●
63	78	11	3,5	7,5	80 NBR B246	24024299	○
65	80	11	3,5	7,5	80 NBR B246	24024300	●
70	85	11	3,5	7,5	80 NBR B246	24024301	●
75	90	11	3,5	7,5	80 NBR B246	24024302	●
80	95	11	3,5	7,5	80 NBR B246	24024303	●
85	100	11	3,5	7,5	80 NBR B246	24024304	●
90	110	13	5	10	80 NBR B246	24024305	●
100	120	13	5	10	80 NBR B246	24024306	●
110	130	13	5	10	80 NBR B246	24024307	●
115	135	13	5	10	80 NBR B246	24024308	●
125	145	13	5	10	80 NBR B246	24026976	●
140	160	13	5	10	80 NBR B246	24024310	●
150	175	16	5	12,5	80 NBR B246	24024311	●
160	185	16	5,5	12,5	80 NBR B246	24024312	●
170	190	13	5	10	80 NBR B246	24024266	○
180	205	16	5,5	12,5	80 NBR B246	24024313	●
200	225	16	5,5	12,5	80 NBR B246	24024314	●
225	255	19	6	15	80 NBR B246	24127447	○
250	270	17	5	10	80 NBR B246	24024270	○

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



d	D	L	C	Profile	Material	Article No.	
310	340	19	6	15	80 NBR B246	24035509	○
320	345	13	5	12,5	80 NBR B246	24078636	○
360	378	13	5	9	80 NBR B246	24029629	○
380	400	16	5,5	10	80 NBR B246	24174996	○
440	460	13	5	10	80 NBR B246	24137980	○
500	520	16	5,5	10	80 NBR B246	24063830	○
680	720	25	7	20	80 NBR B246	24143612	○
750	790	26	7	20	80 NBR B246	24136568	○

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