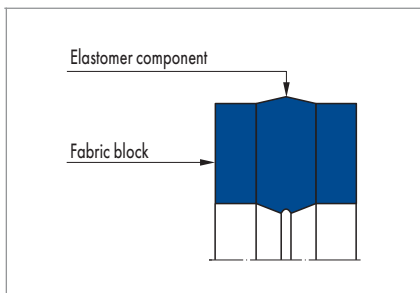


## MERKEL ROTOMATIC M 17



### 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
- Rotary joints
- Grippers

### MATERIAL

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

### OPERATING CONDITIONS

Pressure p	20 MPa
------------	--------

Running speed v	0,1 m/s
-----------------	---------

Medium/ Temperature	80 NBR B246/BI-NBR B3 B248
Hydraulic oils HL, HLP	-30 °C ... +80 °C
HFA fluids	+5 °C ... +60 °C
HFB fluids	+5 °C ... +60 °C
HFC fluids	-30 °C ... +60 °C
HFD fluids	-

Medium/ Temperature	80 NBR B246/BI-NBR B3 B248
Water	+5 °C ... +80 °C
HETG (rapeseed oil)	-30 °C ... +80 °C
HEES (synthetic ester)	-30 °C ... +80 °C
HEPG (glycol)	-30 °C ... +60 °C
Mineral greases	-30 °C ... +80 °C

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

### DESIGN NOTES

Please observe our general design notes in → Technical Manual.

#### Surface quality

Peak-to-valley heights	R <sub>a</sub>	R <sub>max</sub>
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<sub>r</sub> >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.

#### Tolerances

Recommended fit for pressures up to 20 MPa

Nominal Ø d	D	d
≤60 mm	H9	f8
>60 mm	H9	f7