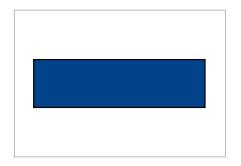
MERKEL GUIDE RING EKF



PRODUCT DESCRIPTION

Slit, non-metallic Merkel Guide Ring EKF.

PRODUCT ADVANTAGES

Non-metallic guide element for pistons.

APPLICATION

- Mobile hydraulics
- Injection moulding machines
- Standard cylinders

MATERIAL

Material	Code
Polyamide	PA 4201

OPERATING CONDITIONS

Running speed v	1 m/s
Loading (permitted specific surface pressure*)	≤25 N/mm² at 20 °C; ≤15 N/mm² at 100 °C

* For the simple determination of the loading, a constant surface pressure is calculated using the projected area (D x H). The actual surface pressure is clearly greater in the centre of the surface than the calculated surface pressure. This is taken into account in the value for the permissible specific surface pressure.

Medium/ Temperature	PA 4201
Hydraulic oils HL, HLP	−30 °C +100 °C
HFA fluids	+5 °C +50 °C
HFB fluids	+5 °C +50 °C
HFC fluids	−30 °C +50 °C
HFD fluids	-
Water	+5 °C +50 °C
HETG (rapeseed oil)	−30 °C +60 °C
HEES (synthetic ester)	−30 °C +80 °C
HEPG (glycol)	−30 °C +50 °C
Mineral greases	−30 °C +100 °C

DESIGN NOTES

Please observe our general design notes in → Technical Manual.

Surface quality

Peak-to-valley heights	Ra	R _{max}
Sliding surface	0,05 0,3 µm	≤2,5 µm
Groove base	≤2 µm	≤10,0 µm
Groove flanks	≤3 µm	≤15,0 µm

Percentage contact area $M_r\!>\!\!50\%$ to max. 90% at cutting depth c = Rz/2 and reference line C ref = 0%.

Tolerances

D	d _F	d _{F1}
H8	h8	h9

The tolerances give are recommended values. The usage of the guide and tolerance definition are to be considered in connection with the seal employed. The diameter dF1 given in the table of dimensions is to be considered exclusively in relation to the guide ring. The corresponding diameter for the adjacent seal housing is to be matched to the sealing component. \rightarrow Technical Manual.

FITTING & INSTALLATION

Merkel Guide Ring EKF can be easily snapped into the housing groove. Careful fitting is a prerequisite for correct function. → Technical Manual.



FREUDENBERG SEALING TECHNOLOGIES