

FREUDENBERG

U-Cup Merkel® L20

DESCRIPTION

- Asymmetrical
- Shortened inner lip
- Tight fit on the outer diameter
- recessed sealing lip

FUNCTION

- Sealing of piston rods
- Use with one-sided pressure load

PRODUCT ADVANTAGES

- Elastomer sealing lip for high sealing requirements
- Simple snap-on assembly
- Market-leading, proprietary design with the widest range of applications in all industries and for a variety of requirements
- Highest quality, durability and safety
- Best results in total cost of ownership

APPLICATIONS

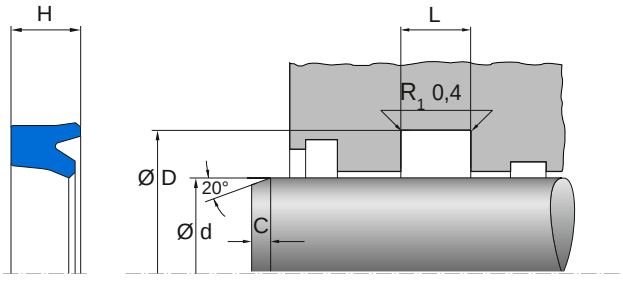
- Large cylinders
- Industrial presses
- Especially suitable for operating media water and water emulsions

CONFORMITY AND CERTIFICATES

- Please consult the material data sheet valid for the respective material for current information on approvals and certificates, as this information depends on the compound and cannot be listed exhaustively here.

DESIGN GUIDELINE

- Sharp edges deburred or chamfered or rounded
- To avoid damage, cylinder tubes and piston rods must be chamfered, surface finish Rt=4m
- Please follow the QR code or hyperlink to the technical manual to obtain further information and instructions.



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INSTALLATION GUIDELINE

- No machining residues, chips, dirt, etc.
- Do not pull the seal over sharp edges, threads, or keyways during installation; cover with an installation sleeve if necessary
- Oil or grease the seal, piston rod, and cylinder tube before installation
- Heating the seal in oil at 80°C to 100°C makes the seal material more elastic and easier to install
- Please follow the QR code or hyperlink to the technical manual to obtain further information and instructions.

STORAGE ADVISE

- Storage temperature <25°C
- No direct heat sources
- No direct sunlight
- No condensation in the storage room
- No exposure to ozone or ionizing radiation
- Recommendations based on the revision of ISO 2230 dated 16.09.1992

Pressure [MPa]	Sliding speed [m/s]
16	0.5

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Temperature [°C]

Medium	85 NBR B203	85 NBR B247	85 FKM K664	85 FKM K668
Hydraulic oils HL, HLP	-30...100	-30...100	-10...200	
HFA fluids	5...60	5...60	5...60	5...60
HFB fluids	5...60	5...60	5...60	5...60
HFC fluids	-30...60	-30...60	-10...40	-10...40
HFD fluids			-10...200	-10...200
Water	5...100	5...100	5...80	5...80
HETG (rapeseed oil)	-30...80	-30...80	-10...80	-10...80
HEES (synthetic esters)	-30...80	-30...80	-10...100	-10...100
HEPG (polyglycols)	-30...60	-30...60	-10...80	-10...80
Mineral greases	-30...110	-30...110	-10...200	-10...200

The values given are based on a limited number of tests on standard test specimens (2 mm sample plates) from laboratory production. The data determined from finished parts may deviate from the above values depending on the manufacturing process and the part geometry.

The information provided herein is based on laboratory tests and on data sources deemed reliable. It constitutes general, non-binding guideline values and does not represent any guarantee of specific properties or suitability for a particular purpose. The suitability of a product for a specific application depends on the actual operating conditions and a variety of factors. Full testing and performance evaluation of the final product are the responsibility of the user. Freudenberg FST GmbH | www.fst.com

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