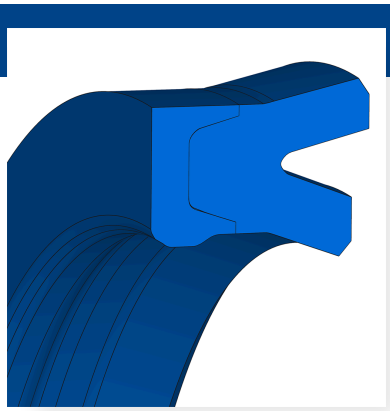


FREUDENBERG

U-Cup HDR-2C

DESCRIPTION

- Asymmetrical
- Supporting bead
- Two bonded polyurethane materials

FUNCTION

- For standard ISO installation spaces, among others
- Sealing of piston rods
- Use with one-sided pressure load
- Support bead against tilting

APPLICATIONS

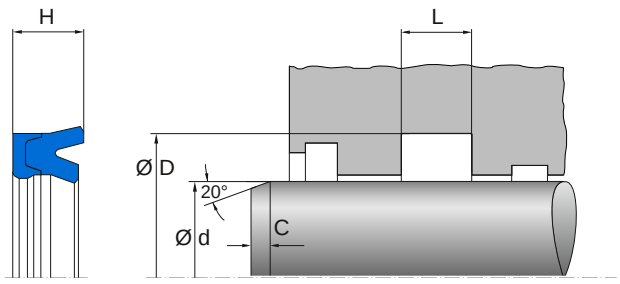
- Earthmoving equipment
- Industrial trucks
- Tail lifts
- Lorry loading cranes
- Support cylinders

PRODUCT ADVANTAGES

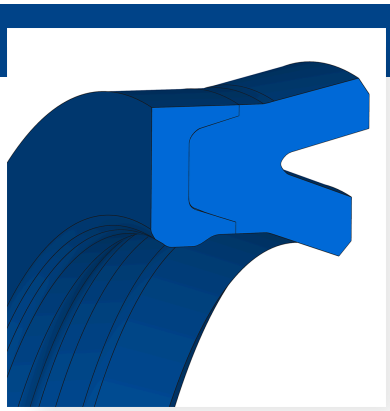
- No upstream seal required
- High pressure creep resistance
- Wide temperature range
- High extrusion reliability
- Long service life
- Market-leading, proprietary design with the widest range of applications in all industries and for a variety of requirements
- Highest quality, durability and safety
- Best results in total cost of ownership
- Highest functional reliability with radial deflection via flexibility of sealing lips
- Safety against metallic contact via high extrusion strenght and enabling large sealing gaps

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.



FREUDENBERG
SEALING TECHNOLOGIES



FREUDENBERG

U-Cup HDR-2C

DESIGN GUIDELINE

- Standard ISO installation spaces
- 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.

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

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
- Please follow the QR code or hyperlink to the technical manual to obtain further information and instructions.

Pressure [MPa]

92 AU 21100
50

Sliding speed [m/s]

92 AU 21100
0.5

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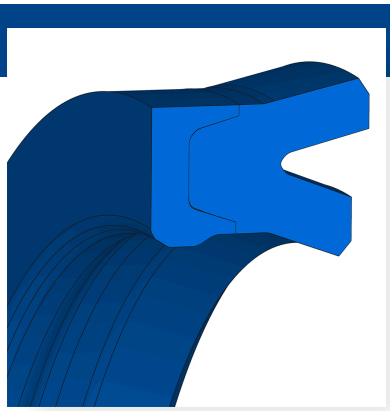
SEALING TECHNOLOGIES



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U-Cup HDR-2C

Temperature [°C]

Medium	92 AU 21100
Hydraulic oils HL, HLP	-50...110
HFA fluids	5...50
HFB fluids	5...50
HFC fluids	-50...40
HFD fluids	
Water	5...50
HETG (rapeseed oil)	-50...60
HEES (synthetic esters)	-50...80
HEPG (polyglycols)	-50...40
Mineral greases	-50...110

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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