H-LINER® S/S1 BUSHING

SELF LUBRICATING POLYMER BUSHINGS

These bushings, manufactured from a friction liner applied on a glass fiber structure, have excellent friction properties and improved wear resistance without external lubrication even on high loads.

Characteristics

The woven material of H-LINER® S/S1 is composed of a friction layer backed on a high mechanical resistance composite structure. The technical characteristics are much more higher than extruded plastics and don't require any greasing.

Advantages of H-LINER® S/S1:
- Maintenance free, self lubricating
- High loads
- Weight reduction
- Noise reduction

Conditions of use

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynamic contact pressure max S</td>
<td>100 MPa</td>
</tr>
<tr>
<td>Static contact pressure max</td>
<td>140 MPa</td>
</tr>
<tr>
<td>Static contact pressure max S1</td>
<td>400 MPa</td>
</tr>
<tr>
<td>Velocity max</td>
<td>0.5 m/s</td>
</tr>
<tr>
<td>Temperature max</td>
<td>-40 to 160 °C</td>
</tr>
<tr>
<td>Temperature max</td>
<td>-40 to 320°F</td>
</tr>
<tr>
<td>Linear expansion coefficient</td>
<td>7 E-6 / °C</td>
</tr>
<tr>
<td>Water absorption (24h)</td>
<td>0.16 %</td>
</tr>
</tbody>
</table>

Tolerances

<table>
<thead>
<tr>
<th>Component</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing</td>
<td>H7- H8</td>
</tr>
<tr>
<td>Shaft</td>
<td>h7- h8</td>
</tr>
</tbody>
</table>
H-LINER® S/S1 BUSHING

Applications:
- Off-shore
- Handling equipment
  - Harbor crane
- Agriculture
  - Front/rear hitches
  - Harvester
- Agri-food
  - Melt-extractor screw
- Hydro power
  - Wagon gates
  - Butterfly valves
  - Turbines (Wicket gate, Operating Ring, servomotor)
- Railway industry
  - Bogie
  - Braking system
  - Coupling system

Mating shafts
For optimal performance we recommend to use ground pin with a roughness lower than Ra 0.4 μm and hardness higher than 400 HB. HEF DURFERRIT PEL® OX pin are particularly appropriated to work against H-LINER® bushings.

Assembly instructions
H-LINER® S/S1 bushings are best assembled by press fitting or by nitrogen mounting (Other assembly techniques can also be used, example: bonding). For further information, please contact HEF Durferrit prior to use.

Available basic forms
Different forms are available with H-LINER® technology: bushings, spherical plain bearings, sliding plates,...
HEF has developed different solutions to fit customer specifications:
- sealing solution against abrasion
- high temperature components.