APPLICATIONS

**Industrial** – Railroad stabilization system, railroad brake linkages, injection molding machines – guide bushings, hydraulic cylinder pivots, water turbines – wicket gates, servomotors, links, water gates, valves

CHARACTERISTICS

- Machinable inner and outer diameters for superior application precision, circularity and cylindricity tolerances
- Pre-machined high precision HPMB bearings available for immediate installation
- High precision through easy single point machining of the bearing liner, on-site prior to installation
- Superior precision achieved with post-installation (inner diameter tolerance IT7 attainable) single point machining of the bearing liner
- High load capacity
- Excellent shock and edge loading capacity
- Low friction with negligible stick-slip
- Low wear rate for extended bearing life
- Excellent corrosion resistance
- Dimensionally stable - very low water absorption, low swelling
- Environmentally friendly grease-free operation

AVAILABILITY

**Bearing forms made to order**: finished cylindrical bushings, pre-machined cylindrical bushings, flanged cylindrical bushings (subject to design review)
### GENERAL

<table>
<thead>
<tr>
<th>Property</th>
<th>Imperial Units</th>
<th>Metric Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum load, ( p )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Static</td>
<td>psi</td>
<td>N/mm²</td>
</tr>
<tr>
<td>Dynamic</td>
<td>psi</td>
<td>N/mm²</td>
</tr>
<tr>
<td>Operating temperature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Min</td>
<td>°F</td>
<td>°C</td>
</tr>
<tr>
<td>Max</td>
<td>°F</td>
<td>°C</td>
</tr>
<tr>
<td>Coefficient of linear thermal expansion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normal to the Surface</td>
<td>( 10^6/°F )</td>
<td>( 10^6/K )</td>
</tr>
</tbody>
</table>

### DRY

<table>
<thead>
<tr>
<th>Property</th>
<th>Imperial Units</th>
<th>Metric Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum sliding speed, ( U )</td>
<td>fpm</td>
<td>m/s</td>
</tr>
<tr>
<td>Maximum ( pU ) factor</td>
<td>psi x fpm</td>
<td>N/mm² x m/s</td>
</tr>
<tr>
<td>Coefficient of friction, ( f )</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### RECOMMENDATIONS

<table>
<thead>
<tr>
<th>Property</th>
<th>Imperial Units</th>
<th>Metric Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shaft surface roughness, ( Ra )</td>
<td>μin</td>
<td>μm</td>
</tr>
<tr>
<td>Shaft surface hardness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normal</td>
<td>HB</td>
<td>HB</td>
</tr>
<tr>
<td>For longer service life</td>
<td>HB</td>
<td>HB</td>
</tr>
</tbody>
</table>

* Depending on operating conditions

### FOR SUPERIOR PERFORMANCE

<table>
<thead>
<tr>
<th>Lubrication Type</th>
<th>GAR-FIL / HPF</th>
</tr>
</thead>
</table>

### MICROSECTION

- **Sliding Layer**
- **Backing**