The special polyamide HDP 330 seal complements the Merkel piston seal program for the installation space DIN ISO 7425-1. This seal withstands the most extreme pressures (up to 800 bar) and allows for use of rougher cylinder liner surfaces, which can cut cylinder production costs.

The HDP 330 is a two-part seal set, consisting of a PA slide ring with a stepped cut and an elastomer energizing element for producing pre-load.

VALUES FOR THE CUSTOMER

- Well suited for applications with extreme operating conditions; offers high functional reliability up to 800 bar
- Enables more cost-effective cylinder construction (rougher surface finishes and sealing over ports allowed)
- Allows quick and precise assembly
- Provides tight sealing function

APPLICATIONS

- Construction Equipment Applications—for extreme conditions (e.g., shock pressures)
- Material Handling Applications—for cost-efficient cylinders (cold drawn tubes)
- Hydraulic Pump applications—for small housings and high pressures

MATERIAL

<table>
<thead>
<tr>
<th>Slide Ring Material</th>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>Fiberglass filled modified polyamide</td>
<td>PA 4112</td>
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<table>
<thead>
<tr>
<th>Contact Pressure Element Material</th>
<th>Hardness</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrile rubber NBR</td>
<td>70 Shore A</td>
<td>70 NBR 177605</td>
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</tbody>
</table>
FEATURES AND BENEFITS

- Extreme strength against gap extrusion
- Extremely high abrasion resistance
- Tight sealing function and drift resistance due to special molding technology (flat sealing area, precise step cut geometry)
- Quick and easy installation—stepped cut for easy fitting in a closed housing
- Greater bore surface roughness permissible in comparison to conventional seals
- Capable of running over properly designed ports
- Rectangular contact pressure element produces consistently high pre-loading force and offers high protection against twisting in the housing
- Housings should preferably comply with ISO 7425-1
- Dynamic and static tightness comparable to PTFE piston seals
- Special chamfers on inner diameter allow interchangeability with O-ring energized seals (e.g., PTFE seals)
- High temperature elastomer material HNBR energizers available