### Plastic Racks

**Specifications**
- **Precision grade**: KHK R 001 grade 5 ~ 6
- **Gear teeth**: Standard full depth
- **Pressure angle**: 20°
- **Material**: MC901
- **Heat treatment**: —
- **Tooth hardness**: (115 ~ 120HRR)

*The precision grade of this product is equivalent to the value shown in the table.*

<table>
<thead>
<tr>
<th>Catalog No.</th>
<th>Module</th>
<th>Effective no. of teeth</th>
<th>Shape</th>
<th>Total length (mm)</th>
<th>Face width (mm)</th>
<th>Height (mm)</th>
<th>Height to pitch line (mm)</th>
<th>Allowable force (N)</th>
<th>Allowable force (kgf)</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PR1-500</td>
<td>m1</td>
<td>159</td>
<td>R1</td>
<td>505</td>
<td>10</td>
<td>12</td>
<td>11</td>
<td>92.8</td>
<td>9.46</td>
<td>0.064</td>
</tr>
<tr>
<td>PR1.5-500</td>
<td>m1.5</td>
<td>105</td>
<td>R1</td>
<td>505</td>
<td>15</td>
<td>20</td>
<td>18.5</td>
<td>209</td>
<td>21.3</td>
<td>0.16</td>
</tr>
<tr>
<td>PR1-1000</td>
<td>m2</td>
<td>79</td>
<td>R1</td>
<td>505</td>
<td>20</td>
<td>25</td>
<td>23</td>
<td>371</td>
<td>37.9</td>
<td>0.27</td>
</tr>
<tr>
<td>PR2-500</td>
<td>m2</td>
<td>63</td>
<td>R1</td>
<td>505</td>
<td>25</td>
<td>30</td>
<td>27.5</td>
<td>580</td>
<td>59.2</td>
<td>0.40</td>
</tr>
<tr>
<td>PR3-500</td>
<td>m3</td>
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<td>R1</td>
<td>505</td>
<td>30</td>
<td>35</td>
<td>32</td>
<td>835</td>
<td>85.2</td>
<td>0.56</td>
</tr>
</tbody>
</table>

**Catalog No.**
- **PR1-1000**: 1010.31
- **PR2-1000**: 1005.31
- **PR2.5-1000**: 1005.10
- **PR3-1000**: 1005.10

**Note**: The backlash of racks differ depending on the size of the mating pinion. Please calculate the backlash from the backlash value of the mating pinion. Also, please refer to the data in the section called ‘Backlash of Rack Tooth (Amount of Tooth Thinning)’ on Page 191.

### BSR Brass Racks

**Specifications**
- **Precision grade**: KHK R 001 grade 4
- **Gear teeth**: Standard full depth
- **Pressure angle**: 20°
- **Material**: Free cutting brass (C3604)
- **Heat treatment**: —
- **Tooth hardness**: (more than 80HV)

*The precision grade of this product is equivalent to the value shown in the table.*

<table>
<thead>
<tr>
<th>Catalog No.</th>
<th>Module</th>
<th>Effective no. of teeth</th>
<th>Shape</th>
<th>Total length (mm)</th>
<th>Face width (mm)</th>
<th>Height (mm)</th>
<th>Height to pitch line (mm)</th>
<th>Allowable force (N)</th>
<th>Allowable force (kgf)</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSR0.5-300</td>
<td>m0.5</td>
<td>190</td>
<td>R1</td>
<td>303</td>
<td>3</td>
<td>9</td>
<td>8.5</td>
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<td>BSR0.8-300</td>
<td>m0.8</td>
<td>118</td>
<td>R1</td>
<td>303</td>
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<td>61.3</td>
<td>6.25</td>
<td>0.095</td>
</tr>
<tr>
<td>BSR1-300</td>
<td>m1</td>
<td>94</td>
<td>R1</td>
<td>303</td>
<td>6</td>
<td>10</td>
<td>9</td>
<td>115</td>
<td>11.7</td>
<td>0.14</td>
</tr>
</tbody>
</table>

**Catalog No.**
- **BSR0.5-300**: 1010.31
- **BSR0.8-300**: 1005.31
- **BSR1-300**: 1005.31

**Note**: The backlash of racks differ depending on the size of the mating pinion. Please calculate the backlash from the backlash value of the mating pinion. Also, please refer to the data in the section called ‘Backlash of Rack Tooth (Amount of Tooth Thinning)’ on Page 191.

**Caution on Secondary Operations**
- Please read “Caution on Performing Secondary Operations” (Page 192) when performing modifications and/or secondary operations for safety concerns. KHK Quick-Mod Gears, the KHK’s system for quick modification of KHK stock gears is also available.