Shaft Mount Backstop Clutches
and Standard Races for Sprag Elements

Shaft Mounted Sprag Clutch Assemblies for Backstop Applications

Types B200 & 500

B200 Series
Plain Outer Race

B500 Series with Circlip Grooves

Dimensions

<table>
<thead>
<tr>
<th>Clutch Size</th>
<th>Nominal Torque (Nm)</th>
<th>Max Shaft Overrun rpm</th>
<th>A (mm)</th>
<th>B (mm)</th>
<th>Cn (mm)</th>
<th>DL (mm)</th>
<th>Di (mm)</th>
<th>D (mm)</th>
<th>Approx Weight (kg)</th>
<th>Standard Bearing with same O.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>B 204A</td>
<td>68</td>
<td>2500</td>
<td>46.99/46.95</td>
<td>25.4</td>
<td>18.30/18.77</td>
<td>3/16x3/32</td>
<td>.34</td>
<td>6204</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B 205A</td>
<td>108</td>
<td>2500</td>
<td>51.98/51.94</td>
<td>25.4</td>
<td>23.62/23.60</td>
<td>3/16x3/32</td>
<td>.34</td>
<td>6205</td>
<td></td>
<td></td>
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<tr>
<td>B 206A</td>
<td>237</td>
<td>2000</td>
<td>61.98/61.95</td>
<td>28.6</td>
<td>32.77/32.74</td>
<td>1/4x1/8</td>
<td>.45</td>
<td>6206</td>
<td></td>
<td></td>
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<tr>
<td>B 207A</td>
<td>373</td>
<td>2000</td>
<td>71.99/71.95</td>
<td>28.6</td>
<td>42.09/42.06</td>
<td>3/32x1/4</td>
<td>.57</td>
<td>6207</td>
<td></td>
<td></td>
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<tr>
<td>B 208A</td>
<td>590</td>
<td>1800</td>
<td>79.99/79.95</td>
<td>31.8</td>
<td>46.78/46.74</td>
<td>3/32x1/4</td>
<td>.79</td>
<td>6208</td>
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<tr>
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<td>1800</td>
<td>89.99/89.95</td>
<td>31.8</td>
<td>56.11/56.08</td>
<td>3/32x1/4</td>
<td>.91</td>
<td>6210</td>
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<tr>
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<td>82</td>
<td>2500</td>
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<td>25.4</td>
<td>16.51/16.50</td>
<td>1/8x1/6</td>
<td>.23</td>
<td>6203</td>
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<tr>
<td>B 502</td>
<td>82</td>
<td>2500</td>
<td>46.96/46.94</td>
<td>22.2</td>
<td>18.75/18.74</td>
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<td>61.96/61.94</td>
<td>26.6</td>
<td>24.65/24.63</td>
<td>1/4x1/8</td>
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<tr>
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<td>2000</td>
<td>71.96/71.94</td>
<td>31.8</td>
<td>28.79/28.77</td>
<td>3/32x1/4</td>
<td>.79</td>
<td>6207</td>
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<tr>
<td>B 510A</td>
<td>339</td>
<td>2000</td>
<td>79.97/79.94</td>
<td>34.9</td>
<td>32.93/32.91</td>
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<td>.91</td>
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<tr>
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<td>2000</td>
<td>79.97/79.94</td>
<td>41.3</td>
<td>34.99/34.97</td>
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<td>2000</td>
<td>89.97/89.94</td>
<td>41.3</td>
<td>39.14/39.12</td>
<td>3/32x1/4</td>
<td>.91</td>
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<td>1800</td>
<td>120.65/120.62</td>
<td>44.4</td>
<td>51.96/51.94</td>
<td>1/2x1/4</td>
<td>1.13</td>
<td>-</td>
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</tbody>
</table>

(1) Max torque capacity for short periods 1.7x torque.

(2) Required shaft diameter for correct operation. Shaft should be made from high tensile carburising steels hardened to 58-62 Rc with minimum case 1.2mm after grinding. Grind to 0.4 um surface finish, with parallelism within 0.2%.

Inner and Outer Races for Standard Sprag Element

A range of standard inner and outer race for the most popular sizes of sprags, manufactured from carburised hardened steel with all races finish ground. Maximum torque capacity of these races is controlled by the keys, and not sprag clutch rating. Housings for races should be manufactured to H7 tolerance and shafts to j6. Race type B transmits torque through heavy press fit in housing. These races eliminate the need to harden shafts and housings, and enable servicing of machines by replacement after normal service wear.

<table>
<thead>
<tr>
<th>Type</th>
<th>Std Bore Sizes</th>
<th>Dimensions mm</th>
<th>For+ Clutch Nos.</th>
</tr>
</thead>
<tbody>
<tr>
<td>230A/230B/230C/2900/290U</td>
<td>10, 15, 20</td>
<td>54.750 72 95 16 6 6 3.5 8x7.0 78</td>
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<td>71.427 90 110 16 10 10 5.0 8x9.0 95</td>
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<tr>
<td>168A/168B/168C/168G/168J/168G/168J</td>
<td>40, 45, 50</td>
<td>88.882 110 140 21 14 14 5.5 8x11.0 120</td>
<td>1310000 13167 134012</td>
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</table>

* Keyways to DIN 6885 tbl. 1. + Races for other Sprag Clutches can be supplied to order.