ROLLER CLUTCHES
FOR 1/8 TO 3/4 HARDENED SHAFTS
UNIDIRECTIONAL DRIVE

> MATERIAL:
Roller Cup - Case-Hardened Steel
Needle Bearing - 52100 Hardened Chrome Steel
Springs - Stainless Steel
Cage - Nylon 66 (or Equivalent)

> OPERATING TEMPERATURE:
Grease +50°F to +160°F

> FEATURES:
Ideal for indexing, backstopping or overrunning operations.
Free rolling one way, drives in opposite direction.
Lightweight, low profile.
High indexing frequency, up to 4 CPS.
Minimum backlash.

> SHAFT REQUIREMENTS:
Shaft surface hardness must be Rc 58 min.

WHAT IT DOES:
Transmits torque load in one direction.
Overruns freely in opposite direction.
Either shaft or housing can be driving member.

HOW IT WORKS:
Rollers wedge between shaft and outer race. Positive wedging forces prevent slipping. Springs position rollers for instantaneous lockup.

GEAR DRIVES SHAFT CLOCKWISE
GEAR OVERRUNS SHAFT COUNTERCLOCKWISE

GEAR DRIVES THROUGH CLUTCH
CLEARANCE EXAGGERATED

INCH COMPONENT

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Bore</th>
<th>D O.D.</th>
<th>W Clutch Width +.00 -.01</th>
<th>Max. Torque lbf in.</th>
<th>d Recom. Shaft Dia. +.0000 -.0005</th>
<th>Housing Bore +.001 -.000</th>
<th>Max. Rotating Overrun Speed rpm</th>
</tr>
</thead>
<tbody>
<tr>
<td>S99NH3-URC0204</td>
<td>1/8</td>
<td>9/32</td>
<td>.250</td>
<td>2.86</td>
<td>1250</td>
<td>.2812</td>
<td>50000</td>
</tr>
<tr>
<td>S99NH3-URC0408</td>
<td>1/4</td>
<td>7/16</td>
<td>.500</td>
<td>18.60</td>
<td>2500</td>
<td>.4370</td>
<td>21000</td>
</tr>
<tr>
<td>S99NH3-URC0608</td>
<td>3/8</td>
<td>5/8</td>
<td>.500</td>
<td>50.40</td>
<td>3750</td>
<td>.6245</td>
<td>14000</td>
</tr>
<tr>
<td>S99NH3-URC0808</td>
<td>1/2</td>
<td>3/4</td>
<td>.500</td>
<td>85.90</td>
<td>5000</td>
<td>.7495</td>
<td>11000</td>
</tr>
<tr>
<td>S99NH3-URC1010</td>
<td>5/8</td>
<td>7/8</td>
<td>.625</td>
<td>175.20</td>
<td>6250</td>
<td>.8745</td>
<td>8500</td>
</tr>
<tr>
<td>S99NH3-URC1210</td>
<td>3/4</td>
<td>1</td>
<td>.625</td>
<td>206.00</td>
<td>.7500</td>
<td>.9995</td>
<td>12000</td>
</tr>
</tbody>
</table>

* Plastic Springs