STC/STB 600 AND 940 CLUTCHES AND BRAKES

Superior tension control through a broad torque range.

The STC 600 and 940 Clutches, and STB 600 and 940 Brakes allow superior torque control for your web with Nexen’s newest line of patent-pending tension control clutches and brakes. Three different sized piston sets can be actuated singly, or in any combination for a large number of torque-to-air pressure ranges.

This unique design gives you precise torque control without the problems associated with operating at low air pressures.

Different piston sizes give you the widest range
Nexen’s clutches and brakes actuate using a piston / diaphragm combination in three different sizes. There are no o-rings to stick, no seals to drag. There’s nothing to hinder precise control of torque at lower operating pressures.

By engaging and disengaging various combinations of small, medium and large piston sets, you’ll have a broad range of torque vs. Air pressure combinations. This gives you precise control over a wide range of torques and air pressures and lets you run a wider variety of materials on the same machine.

Features and benefits
• Fine torque control for precise tension control of web processes - 500:1 tension control range
• Field and dynamic programming of pressure/torque characteristics for flexible operations
• Diaphragm operation — no seals to drag or o-rings to stick for great low pressure performance
• Different size piston sets
• Through-shaft mounting
• Compact size
• No rotary air unions required — eliminates “gun drilling” shafts

Variable torque ranges through the use of valves
Use air valves to engage combinations of pistons as shown in Diagram 2. Read the torque value for each piston set directly from the Torque vs. Air Pressure graph on the next page and add them.

**Example: STB 600**
Large piston set at 40 p.s.i. has a rated torque of 95 in-lb.
Medium piston set at 40 p.s.i. has a rated torque of 67 in-lb.
Small piston set at 40 p.s.i. has a rated torque of 41 in-lb.

Total torque at 40 p.s.i.: Large + Medium = 95 + 67 = 162 in-lb.
Small only = 41 in-lb.

The total torque range of the clutch or brake will equal the sum of the torques of the individual sets from 0 to maximum air pressure.
STC/STB 600 AND 940
CLUTCHES AND BRAKES

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<table>
<thead>
<tr>
<th>MODEL</th>
<th>PRODUCT NUMBER</th>
<th>MAX. RPM</th>
<th>TEE FITTING</th>
<th>ELBOWS</th>
<th>TUBING</th>
<th>BORE DIAMETER</th>
<th>SHIPPING WEIGHT</th>
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<tbody>
<tr>
<td>STB 600</td>
<td>927203</td>
<td>3600</td>
<td>5</td>
<td>3</td>
<td>60 Inch [1524 MM]</td>
<td>1.125* Inch [29 MM]</td>
<td>9.7 Lbs. [4.4 Kg]</td>
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<tr>
<td>STB 940</td>
<td>927207</td>
<td>2400</td>
<td>5</td>
<td>3</td>
<td>60 Inch [1524 MM]</td>
<td>1.938* Inch [49 MM]</td>
<td>31.3 Lbs. [14.2 Kg]</td>
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<tr>
<td>STC 600</td>
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<td>3600</td>
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<td>3</td>
<td>60 Inch [1524 MM]</td>
<td>1.125* Inch [29 MM]</td>
<td>20.0 Lbs. [9 Kg]</td>
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<tr>
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<td>5</td>
<td>3</td>
<td>60 Inch [1524 MM]</td>
<td>1.938* Inch [49 MM]</td>
<td>54.2 Lbs. [25 Kg]</td>
</tr>
</tbody>
</table>

*With standard square keyways. Consult factory for other bore size requirements.
STC/STB 600 AND 940 CLUTCHES AND BRAKES

Superior tension control through a broad torque range.

STC 600/940 Dimensional Drawing (Shown with recommended guard)
Nexen recommends using adequate guarding on all brakes and clutches.

<table>
<thead>
<tr>
<th>MODEL</th>
<th>PRODUCT NUMBER</th>
<th>AJ3</th>
<th>CP1</th>
<th>CP2</th>
<th>CP3</th>
<th>CR</th>
<th>CR1</th>
<th>CS</th>
<th>CW</th>
<th>HUB LENGTH (SQ.)</th>
<th>KEY (SQ.)</th>
<th>KL</th>
<th>P</th>
<th>PA</th>
<th>PB</th>
<th>PC</th>
<th>SET SCREW</th>
<th>OPTIONAL GUARD PRODUCT NUMBER</th>
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<tr>
<td>STC 600</td>
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<td>.140</td>
<td>.178</td>
<td>2.52</td>
<td>3.01</td>
<td>4.51</td>
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<td>.8006</td>
<td>[20,34]</td>
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STC 600/940 Dimensional Drawing