Shaft-Mounted Clutch-Brake
LSCB-44

Nexen’s through-shaft, air-to-spring clutch-brake is the ideal solution for repetitive start/stop conveying applications. Mounted on the roller shaft of an accumulating conveyor, LSCB clutch-brakes provide positive stopping and holding. Nexen’s splined hub design assures full brake torque to the system. Both clutching and braking components utilize the same piston to eliminate simultaneous engagement. Because the clutch release springs also serve as the brake engagement force, the brake automatically engages as the clutch releases for fast, dependable stopping and holding. Combining simple design, outstanding performance and low cost, the LSCB-44 is the obvious choice for motion control on material handling conveyor systems.

- Clutch Torque: 238 Nm at 5.5 bar [2110 in-lb at 80 psi]
- Brake Torque: 6.3 Nm [56 in-lb] at zero air pressure
- Bore range: 12-32 mm [0.500-1.250 in]
- Single piston design eliminates possibility of clutch-brake overlap
- Brake engagement stops LSCB hub
- Variable mounting configurations: customer supplied sprocket or can be configured for sheave, plate or double-single sprocket or timing belt sprocket
- Open design for improved airflow and high heat dissipation
- Internal spline drive for trouble-free disengagement performance
- Shielded ball bearings standard for zero drag torque—shear modulus of bearing grease creates negligible drag torque (sealed bearings also available)
- No rotary air union required
- Field repairable o-rings, facings and springs
- Through-shaft design with three set screws for easy mounting
Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Product Number</th>
<th>Bore Range [mm]</th>
<th>Clutch Torque at 1 [psi] Nm [in-lb]</th>
<th>Brake Torque at 0 psi Nm [in-lb]</th>
<th>Inertia1 rotating with drive kg-m² [lb-in²]</th>
<th>Inertia1 rotating with shaft kg-m² [lb-in²]</th>
<th>Shipping Weight kg [lbs]</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSCB-44</td>
<td>Consult Factory [0.500-1.250]</td>
<td>12-32</td>
<td>238 [2110]</td>
<td>6.3 [56]</td>
<td>0.00337 [11.51]</td>
<td>0.000889 [3.03]</td>
<td>3.6</td>
</tr>
</tbody>
</table>

1 This is a calculated value.

Clutch Torque vs. Air Pressure

Spring-Set Brake Torque

6.33 Nm [56 in-lb]

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