Compu-Spread SCB
Sander Control Block

Rexroth’s SCB manifold assemblies are designed for the control of primary sander functions. The 2 function version is for auger/conveyor and spinner; the 3 function version for auger/conveyor, spinner and liquid (pre-wet or anti-icing). They are sized for pressures and flow rates commonly required in modern snow and ice control systems. Accurate speed control of the hydraulic motors is guaranteed by the use of individual pressure compensated proportional valves. Both 2 and 3 function assemblies can be supplied for open and closed centre systems.

Open centre systems (with fixed displacement pump) have an unloading valve which directs pump flow to tank when no functions are required. When activated, the load pressure signal is sent to the unloader so that system pressure is just above load pressure, ensuring the maximum efficiency possible with these circuits. These assemblies also provide primary system pressure relief.

Closed centre systems (with variable displacement load sensing pumps) typically provide even higher system efficiency. In this version the load pressure signal is sent to the pump controller, so that it de-strokes at standby pressure when no functions are required.

Maximum environmental protection is provided when the manifolds are installed in a stainless steel enclosure.

Features

- High performance cartridge valves provide accuracy, reliability and enhanced serviceability.
- Anodized aluminum manifold provides good environmental protection.
- All main fluid ports are on one surface, facilitating plumbing to actuators and other devices.
- Stainless steel enclosure solutions afford great protection from harsh environments.
# Technical Data

## Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>2 Function SCB-2</th>
<th>3 Function SCB-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Operating Pressure</td>
<td>210 bar</td>
<td>3000 psi</td>
</tr>
<tr>
<td><strong>Maximum Inlet Flow Rate</strong></td>
<td>115 L/min</td>
<td>30 USGPM</td>
</tr>
<tr>
<td><strong>Maximum Flow to Spinner</strong></td>
<td>40 L/min</td>
<td>10.5 USGPM</td>
</tr>
<tr>
<td><strong>Maximum Flow to Conveyor</strong></td>
<td>80 L/min</td>
<td>21 USGPM</td>
</tr>
<tr>
<td><strong>Maximum Flow to Liquid (3 Function only)</strong></td>
<td>40 L/min</td>
<td>10.5 USGPM</td>
</tr>
<tr>
<td>Fluid</td>
<td>Mineral Oil or ATF</td>
<td></td>
</tr>
<tr>
<td><strong>Fluid Operating Temperature Range</strong></td>
<td>-30° to 100° C</td>
<td>-22° to 212° F</td>
</tr>
<tr>
<td>Fluid Cleanliness Recommendation</td>
<td>per ISO 4406 (c): 19/17/14</td>
<td></td>
</tr>
<tr>
<td>Fluid Viscosity</td>
<td>5 to 400 cSt (10 to 100 preferred)</td>
<td>42 to 2000 SUS (60 to 500 preferred)</td>
</tr>
<tr>
<td>Electrical, per Solenoid</td>
<td>400 to 1,800 mA, 12 VDC</td>
<td>100 Hz PWM (dither) frequency</td>
</tr>
</tbody>
</table>

## Fluid Connections

(N.B. all ports are not used in all versions)

<table>
<thead>
<tr>
<th>Port</th>
<th>2 Function SCB-2</th>
<th>3 Function SCB-3</th>
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<tbody>
<tr>
<td>Pressure, Tank (P, T)</td>
<td>#16 SAE “O” Boss</td>
<td>#16 SAE “O” Boss</td>
</tr>
<tr>
<td>Conveyor (C)</td>
<td>#10 SAE “O” Boss</td>
<td>#10 SAE “O” Boss</td>
</tr>
<tr>
<td>Spinner (S), Liquid (PW, 3 Function only)</td>
<td>#8 SAE “O” Boss</td>
<td>#8 SAE “O” Boss</td>
</tr>
<tr>
<td>Load Sense Port (LS)</td>
<td>#6 SAE “O” Boss</td>
<td>#6 SAE “O” Boss</td>
</tr>
<tr>
<td>Gauge (GP)</td>
<td>#6 SAE “O” Boss</td>
<td>#4 SAE “O” Boss</td>
</tr>
<tr>
<td>Drain (Y)</td>
<td>#6 SAE “O” Boss</td>
<td></td>
</tr>
</tbody>
</table>

## Dimensions

<table>
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<th>2 Function SCB-2</th>
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<tr>
<td>Enclosure Overall (W x H x D)</td>
<td>235 x 362 x 211 mm (9.3 x 14.3 x 8.3 inches)</td>
<td>235 x 362 x 211 mm (9.3 x 14.3 x 8.3 inches)</td>
</tr>
<tr>
<td>Manifold Overall (c/w Components, W x H x D)</td>
<td>135 x 287 x 117 mm (5.3 x 11.3 x 4.6 inches)</td>
<td>172 x 287 x 117 mm (6.8 x 11.3 x 4.6 inches)</td>
</tr>
<tr>
<td>Weight (Assembly with Enclosure)</td>
<td>12 kg (26 pounds)</td>
<td>15 kg (33 pounds)</td>
</tr>
</tbody>
</table>

## Environmental

Manifold is made of aluminum, anodized after machining. All cartridge valves are suitable for outdoor use. Installation in the optional sealed stainless steel enclosure will extend the life of all external surfaces and components, which would otherwise be exposed to the harsh environment found in snow and ice control applications.