Product Data Sheet
TS941 Series
High Pressure Spool Valve

The TS941 Series Spool Valve is based on a balanced spool design, to create a fast “ON/OFF” fluid dispensing function that is not affected by fluid input pressure. The spool action displaces a portion of the fluid back into the nozzle during shut off. This creates an automatic “suck-back” anti-drip feature. An oil chamber is provided for use above the upper seal to create an additional liquid seal that will prevent moisture from being carried onto the spool. The design facilitates easy maintenance without the need for special tools. The valve is designed to be opened by air pressure and closed by a return spring (single acting). A port is provided so that the valve may be connected for air closing without the spring (double acting).

The TS941 Series side ports can be rotated to provide conveniently located valve connections. The hardened spool slides in high quality seals and is suitable for use with fluids having a viscosity of up to 3,000,000 cps at pressures of up to 2,500 psi (172.4bar).

The valve is shipped with the following items:
- Oiler
- Valve air hose
- Luer lock fluid line
- Variety of Fluid inlet fittings

KEY FEATURES AND BENEFITS
- Very fast dispensing output
- Fixed body and air cylinder position
- High quality seals extends cycle life
- Can handle very high fluid pressures

TYPICAL APPLICATIONS
- Applying beads of silicone for gasketing applications
- Dispensing solder mask onto selected areas of PCBA’s
- Dispensing grease in lubrication applications
**TYPICAL SETUP**

- **WHAT'S IN THE BOX?**
  - Fluid reservoirs: The valve can be fed from the TS1254 or TS1258 Pressure Tank, or from any size cartridge.
  - Suck back control cap: The suck back stroke can be adjusted with the 934-003-000 suck back control cap.
  - Dispensing Tips: Dispensing nozzles are recommended for this valve type.

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**SPECIFICATIONS & PART NUMBERS**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>TS941</th>
<th>TS941A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size (Imperial):</td>
<td>4.7” Length x 1.50”</td>
<td>4.7” Length x 1.50”</td>
</tr>
<tr>
<td>Size (Metric):</td>
<td>119.4mm x 38.1mm</td>
<td>119.4mm x 38.1mm</td>
</tr>
<tr>
<td>Weight:</td>
<td>1.6 lb (728g)</td>
<td>1.6 lb (731g)</td>
</tr>
<tr>
<td>Fluid Inlet Port:</td>
<td>¾” NPT female</td>
<td>¼” NPT female</td>
</tr>
<tr>
<td>Fluid Outlet Port:</td>
<td>¼” NPT female</td>
<td>¼” NPT female</td>
</tr>
<tr>
<td>Aux Air Inlet Port:</td>
<td>¼” female</td>
<td>¼” female</td>
</tr>
<tr>
<td>Activation Pressure:</td>
<td>70 psi (4.8bar) Min.</td>
<td>70 psi (4.8bar) Min.</td>
</tr>
<tr>
<td>Max Fluid Pressure:</td>
<td>2500 psi (172.4bar)</td>
<td>2500 psi (172.4bar)</td>
</tr>
<tr>
<td>Operating Frequency:</td>
<td>400+ cycles/min.</td>
<td>400+ cycles/min.</td>
</tr>
<tr>
<td>Mounting Port:</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Viscosity Range:</td>
<td>1 - 3 000 000cps</td>
<td>1 - 3 000 000cps</td>
</tr>
<tr>
<td>Wetted Parts:</td>
<td>303 SS, Hard Chrome plated Stainless Steel, UHMWPE, EPR</td>
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</tr>
</tbody>
</table>

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**ACCESSORIES**

**Fluid reservoirs**: The valve can be fed from the TS1254 or TS1258 Pressure Tank, or from any size cartridge.

**Suck back control cap**: The suck back stroke can be adjusted with the 934-003-000 suck back control cap.

**Dispensing Tips**: Dispensing nozzles are recommended for this valve type.

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