SVP-24 Stent Tester

Dynatek's Stent and Vascular Prosthesis Tester utilizes a Hyper Drive linear motor to produce an adjustable bellows compression which allows for physiologically relevant stent loading conditions for up to 24 test samples from physiological to accelerated testing rates of up to 150Hz.

Dynatek's SVP-24 features a highly accurate and easy to use laser micrometer system that provides real-time mock vessel distention feedback that can either be used to monitor the test or to control the test in closed-loop operation.

The large number of samples also greatly benefits manufacturing QA when ongoing testing of approved stents is required.

- Compact design allows for smaller footprint than previous systems.
- Ability to test up to 24 samples simultaneously under precisely controlled test parameters.
- Advanced Universal Controller with unmatched data collection capability.
- FDA accepted with appropriate documentation.
- Data logging to TDMS file which can be accessed by Excel or other software such as DIAdem and Matlab, for managing, analyzing, and reporting the test data collected.
- Advanced frequency, temperature, and pressure control gives the user the ability to establish, maintain, and recall required test parameters.
- Ability to monitor sample tube pressures at all test frequencies.
- Closed loop laser micrometer feedback allows for automatic control and monitoring of tube OD.
- Long life electromagnetic Hyper Drive linear motor.
- Design allows for easy access to test samples.
- Universal Controller allows for expansion of the SVP-24 system to accommodate future host computer technology.
- Future upgrades with advanced SCADA technology allow complete lab monitoring of all machines from a single computer.
- Real-time sample pressure and stent deflection adjustments without affecting data collection.

1 Not included
Dynatek’s SVP Stent Tester Specifications

<table>
<thead>
<tr>
<th>Description</th>
<th>Specification</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of test samples:</td>
<td>24 test samples</td>
<td>24 test samples standard</td>
</tr>
<tr>
<td>Mock vessel configuration:</td>
<td>Straight, curved, bifurcated</td>
<td>Additional special configurations upon request</td>
</tr>
<tr>
<td>Mock vessel length (straight)</td>
<td>Adjustable to ≤ 140 mm</td>
<td>End effects should be considered</td>
</tr>
<tr>
<td>Mock vessel diameter range:</td>
<td>≈2 mm to 12 mm</td>
<td></td>
</tr>
<tr>
<td>Typical distention:</td>
<td>0.3% to 18% of stent or mock vessel OD</td>
<td>Full physiological range possible</td>
</tr>
<tr>
<td>Maximum distention:</td>
<td>Limited by mock vessel properties</td>
<td>57 mL max volume per stroke</td>
</tr>
<tr>
<td>Testing fluid:</td>
<td>PBS or distilled water</td>
<td>Not limited to distilled water</td>
</tr>
<tr>
<td>Fluid temperature:</td>
<td>Ambient to ≤ 45°C</td>
<td>Temperature control accurate to +/− 0.3°C of set temperature</td>
</tr>
<tr>
<td>Test monitoring:</td>
<td>Stent deflection, mock vessel distension, pressure</td>
<td>Stent deflection requires high speed camera (best method)</td>
</tr>
<tr>
<td>Automatic test control method:</td>
<td>Mock vessel distension</td>
<td>optional laser micrometer</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Module</th>
<th>Dimensions</th>
<th>Power requirement</th>
<th>Weight</th>
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<tbody>
<tr>
<td>SVP-24™</td>
<td>70”W x 25”D x 44”H</td>
<td>120 VAC 12 A</td>
<td>221 lbs. (complete system)</td>
</tr>
</tbody>
</table>

Specifications subject to change.

Manifold options:

- Various diameters of graft tube adapters and quick disconnects for different test sample sizes.
- Mounting fixture to assist sample preparation.
- Option to allow individual samples to be removed or replaced without interrupting the test.
- UPS (Uninterruptable Power Supply) system.
- Adapters for catheter deployment of stents on the tester.
- Other custom modifications at customer request.

Specifications subject to change.

Available Add-ons

To receive a customized proposal, contact us today at:

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